Fluency Table of Contents

Compute with Percents—Skills Practice

Name: _____

Find the percent. **Form A**

1. 30% of 250 = _____
2. 90% of 130 = _____
3. 15% of 80 = _____
4. 10% of 70 = _____
5. 110% of 630 = _____
6. 125% of 84 = _____
7. 20% of 75 = _____
8. 15% of 40 = _____
9. 25% of 60 = _____
10. 70% of 120 = _____
11. 80% of 80 = _____
12. 50% of 82 = _____
13. 29% of 300 = _____
14. 11% of 100 = _____
15. 75% of 32 = _____
16. 50% of 196 = _____
17. 100% of 90 = _____
18. 10% of 720 = _____
19. 80% of 25 = _____
20. 60% of 70 = _____
21. 8% of 200 = _____
22. 150% of 80 = _____
23. 35% of 40 = _____
24. 40% of 120 = _____

Compute with Percents—Skills Practice

Name: _____

Find the percent. **Form B**

1. 20% of 15 = _____
2. 140% of 55 = _____
3. 60% of 105 = _____
4. 90% of 170 = _____
5. 50% of 96 = _____
6. 25% of 116 = _____
7. 75% of 24 = _____
8. 100% of 80 = _____
9. 10% of 390 = _____
10. 25% of 480 = _____
11. 19% of 400 = _____
12. 40% of 35 = _____
13. 30% of 520 = _____
14. 70% of 40 = _____
15. 80% of 140 = _____
16. 50% of 122 = _____
17. 11% of 600 = _____
18. 90% of 260 = _____
19. 48% of 200 = _____
20. 75% of 148 = _____
21. 60% of 5 = _____
22. 110% of 80 = _____
23. 40% of 120 = _____
24. 25% of 40 = _____

Compute with Percents—Skills Practice

Name: _____

Use the part and the percent to find the whole. **Form A**

1. 6 = 10% of _____
2. 62 = 50% of _____
3. 15 = 25% of _____
4. 12 = 48% of _____
5. 3 = 30% of _____
6. 8 = 40% of _____
7. 49 = 70% of _____
8. 52 = 26% of _____
9. 50 = 20% of _____
10. 9 = 75% of _____
11. 32 = 80% of _____
12. 11 = 100% of _____
13. 150 = 50% of _____
14. 81 = 90% of _____
15. 186 = 62% of _____
16. 12 = 20% of _____
17. 24 = 75% of _____
18. 40 = 40% of _____
19. 35 = 70% of _____
20. 27 = 10% of _____
21. 98 = 49% of _____
22. 80 = 40% of _____
23. 15 = 15% of _____
24. 30 = 75% of _____

Compute with Percents—Skills Practice

Name: _____

Use the part and the percent to find the whole. **Form B**

1. 18 = 90% of _____
2. 70 = 70% of _____
3. 54 = 50% of _____
4. 14 = 20% of _____
5. 66 = 11% of _____
6. 64 = 80% of _____
7. 16 = 25% of _____
8. 16 = 10% of _____
9. 49 = 100% of _____
10. 10 = 40% of _____
11. 60 = 75% of _____
12. 198 = 99% of _____
13. 70 = 70% of _____
14. 15 = 60% of _____
15. 2 = 20% of _____
16. 38 = 19% of _____
17. 11 = 25% of _____
18. 8 = 50% of _____
19. 6 = 30% of _____
20. 60 = 15% of _____
21. 24 = 10% of _____
22. 40 = 25% of _____
23. 30 = 10% of _____
24. 15 = 20% of _____

Compute with Percents—Repeated Reasoning

Name: _____

Find patterns in percents.

Set A

1. 60% of 20 = _____
2. 60% of 30 = _____
3. 60% of 40 = _____
4. 50% of 20 = _____
5. 50% of 30 = _____
6. 50% of 40 = _____
7. 40% of 20 = _____
8. 40% of 30 = _____
9. 40% of 40 = _____
10. 30% of 20 = _____
11. 30% of 30 = _____
12. 30% of 40 = _____

Set B

1. 8% of 25 = _____
2. 16% of 25 = _____
3. 24% of 25 = _____
4. 8% of 50 = _____
5. 16% of 50 = _____
6. 24% of 50 = _____
7. 8% of 75 = _____
8. 16% of 75 = _____
9. 24% of 75 = _____

Describe a pattern you see in one of the sets of problems above.

_____

_____

_____

Compute with Percents—Repeated Reasoning

Name: _____

Find place value patterns.

Set A

1. 25% of 4 = _____
2. 25% of 40 = _____
3. 25% of 400 = _____
4. 50% of 4 = _____
5. 50% of 40 = _____
6. 50% of 400 = _____
7. 75% of 4 = _____
8. 75% of 40 = _____
9. 75% of 400 = _____

Set B

1. 100% of 300 = _____
2. 10% of 300 = _____
3. 1% of 300 = _____
4. 200% of 300 = _____
5. 20% of 300 = _____
6. 2% of 300 = _____
7. 400% of 300 = _____
8. 40% of 300 = _____
9. 4% of 300 = _____

Describe a pattern you see in one of the sets of problems above.

_____

_____

_____

Compute with Percents—Repeated Reasoning

Name: _____

Find patterns using the distributive property.

Set A

1. 30% of 10 = _____
2. 20% of 10 = _____
3. 50% of 10 = _____
4. 30% of 20 = _____
5. 20% of 20 = _____
6. 50% of 20 = _____
7. 30% of 30 = _____
8. 20% of 30 = _____
9. 50% of 30 = _____

Set B

1. 2% of 50 = _____
2. 4% of 50 = _____
3. 6% of 50 = _____
4. 20% of 50 = _____
5. 40% of 50 = _____
6. 60% of 50 = _____
7. 200% of 50 = _____
8. 400% of 50 = _____
9. 600% of 50 = _____
10. 220% of 50 = _____
11. 440% of 50 = _____
12. 660% of 50 = _____
13. 222% of 50 = _____
14. 444% of 50 = _____
15. 666% of 50 = _____

Describe a pattern you see in one of the sets of problems above.

_____

_____

_____

Divide Fractions—Skills Practice

Name: _____

Find the quotient.

Form A

1 $\frac{2}{3} \div \frac{3}{6} =$ _____

2 $\frac{1}{2} \div \frac{1}{6} =$ _____

3 $\frac{2}{2} \div \frac{5}{6} =$ _____

4 $\frac{1}{4} \div \frac{1}{6} =$ _____

5 $\frac{2}{4} \div \frac{3}{6} =$ _____

6 $\frac{7}{4} \div \frac{3}{2} =$ _____

7 $\frac{8}{5} \div \frac{4}{10} =$ _____

8 $\frac{2}{3} \div \frac{5}{6} =$ _____

9 $\frac{5}{8} \div \frac{3}{4} =$ _____

10 $\frac{5}{4} \div \frac{10}{12} =$ _____

11 $\frac{4}{6} \div \frac{3}{6} =$ _____

12 $\frac{5}{4} \div \frac{1}{8} =$ _____

13 $\frac{1}{8} \div \frac{5}{4} =$ _____

14 $\frac{3}{2} \div \frac{6}{5} =$ _____

15 $\frac{9}{4} \div \frac{3}{2} =$ _____

16 $\frac{3}{10} \div \frac{6}{5} =$ _____

17 $\frac{6}{4} \div \frac{2}{8} =$ _____

18 $\frac{4}{8} \div \frac{5}{5} =$ _____

Divide Fractions—Skills Practice

Name: _____

Find the quotient.

Form B

1 $\frac{7}{4} \div \frac{1}{2} =$ _____

2 $\frac{2}{3} \div \frac{2}{3} =$ _____

3 $\frac{5}{6} \div \frac{4}{12} =$ _____

4 $\frac{8}{10} \div \frac{2}{5} =$ _____

5 $\frac{7}{8} \div \frac{6}{8} =$ _____

6 $\frac{5}{6} \div \frac{2}{3} =$ _____

7 $\frac{1}{10} \div \frac{1}{5} =$ _____

8 $\frac{3}{5} \div \frac{2}{3} =$ _____

9 $\frac{5}{3} \div \frac{4}{4} =$ _____

10 $\frac{4}{3} \div \frac{8}{6} =$ _____

11 $\frac{6}{12} \div \frac{1}{3} =$ _____

12 $\frac{3}{8} \div \frac{9}{4} =$ _____

13 $\frac{3}{10} \div \frac{2}{5} =$ _____

14 $\frac{6}{6} \div \frac{4}{3} =$ _____

15 $\frac{10}{4} \div \frac{5}{6} =$ _____

16 $\frac{2}{6} \div \frac{2}{5} =$ _____

17 $\frac{6}{5} \div \frac{3}{10} =$ _____

18 $\frac{1}{5} \div \frac{1}{3} =$ _____

Divide Fractions—Repeated Reasoning

Name: _____

Find patterns in fraction division.

Set A

1. $\frac{1}{2} \div \frac{1}{2} =$ _____
2. $\frac{3}{2} \div \frac{1}{2} =$ _____
3. $\frac{1}{2} \div \frac{1}{4} =$ _____
4. $\frac{3}{2} \div \frac{1}{4} =$ _____
5. $\frac{1}{2} \div \frac{1}{8} =$ _____
6. $\frac{3}{2} \div \frac{1}{8} =$ _____
7. $\frac{1}{2} \div \frac{1}{16} =$ _____
8. $\frac{3}{2} \div \frac{1}{16} =$ _____

Set B

1. $\frac{1}{2} \div \frac{1}{4} =$ _____
2. $\frac{3}{2} \div \frac{1}{4} =$ _____
3. $\frac{1}{2} \div \frac{2}{4} =$ _____
4. $\frac{3}{2} \div \frac{2}{4} =$ _____
5. $\frac{1}{2} \div \frac{3}{4} =$ _____
6. $\frac{3}{2} \div \frac{3}{4} =$ _____
7. $\frac{1}{2} \div \frac{4}{4} =$ _____
8. $\frac{3}{2} \div \frac{4}{4} =$ _____

Describe a pattern you see in one of the sets of problems above.

_____

_____

_____

Divide Whole Numbers—Skills Practice

Name: _____

Find the quotient.

Form A

1 $61\overline{)793}$

2 $25\overline{)675}$

3 $46\overline{)506}$

4 $30\overline{)510}$

5 $41\overline{)328}$

6 $80\overline{)5{,}680}$

7 $35\overline{)2{,}170}$

8 $22\overline{)7{,}040}$

9 $72\overline{)7{,}488}$

10 $63\overline{)53{,}865}$

11 $75\overline{)72{,}525}$

12 $40\overline{)9{,}240}$

13 $44\overline{)54{,}164}$

14 $15\overline{)15{,}810}$

15 $12\overline{)17{,}472}$

Divide Whole Numbers—Skills Practice

Name: _____

Find the quotient.

Form B

1 $45\overline{)4{,}410}$

2 $25\overline{)475}$

3 $21\overline{)189}$

4 $81\overline{)972}$

5 $20\overline{)960}$

6 $54\overline{)702}$

7 $60\overline{)8{,}520}$

8 $33\overline{)8{,}580}$

9 $70\overline{)3{,}570}$

10 $64\overline{)47{,}616}$

11 $14\overline{)14{,}168}$

12 $15\overline{)18{,}945}$

13 $66\overline{)89{,}958}$

14 $75\overline{)62{,}025}$

15 $76\overline{)8{,}208}$

Divide Whole Numbers—Repeated Reasoning

Name: _____

Find place value patterns.

Set A

1. $10\overline{)16{,}000}$
2. $100\overline{)16{,}000}$
3. $1{,}000\overline{)16{,}000}$
4. $5\overline{)16{,}000}$
5. $50\overline{)16{,}000}$
6. $500\overline{)16{,}000}$

Set B

1. $120 \div 10 =$ _____
2. $1{,}200 \div 10 =$ _____
3. $12{,}000 \div 10 =$ _____
4. $120 \div 20 =$ _____
5. $1{,}200 \div 20 =$ _____
6. $12{,}000 \div 20 =$ _____
7. $120 \div 30 =$ _____
8. $1{,}200 \div 30 =$ _____
9. $12{,}000 \div 30 =$ _____
10. $120 \div 40 =$ _____
11. $1{,}200 \div 40 =$ _____
12. $12{,}000 \div 40 =$ _____

Describe a pattern you see in one of the sets of problems above.

_____

_____

_____

Add Decimals—Skills Practice

Name: _____

Add. **Form A**

1. 22.098 + 14.103 = _____
2. 6.07 + 12.149 = _____
3. 3.1 + 4.904 = _____
4. 8.062 + 7.189 = _____
5. 11.802 + 32.4 = _____
6. 13.765 + 6.23 = _____
7. 76.147 + 5.07 = _____
8. 63.98 + 0.031 = _____
9. 0.093 + 0.02 = _____
10. 5.2 + 0.871 = _____
11. 41.82 + 7.593 = _____
12. 2.76 + 27.959 = _____
13. 8.91 + 0.092 = _____
14. 33.99 + 24.002 = _____
15. 1.099 + 0.038 = _____
16. 2.08 + 0.671 = _____
17. 9.7 + 0.345 = _____
18. 1.999 + 52.651 = _____
19. 17.76 + 8 + 45.309 = _____
20. 68.821 + 15.34 + 1.009 = _____

Add Decimals—Skills Practice

Name: _____

Add.

Form B

1. 23.189 + 15.014 = _____
2. 7.08 + 11.238 = _____
3. 2.7 + 3.603 = _____
4. 9.073 + 4.479 = _____
5. 13.732 + 36.5 = _____
6. 12.803 + 5.18 = _____
7. 67.258 + 9.05 = _____
8. 54.87 + 0.082 = _____
9. 0.058 + 0.08 = _____
10. 4.4 + 0.936 = _____
11. 52.64 + 4.865 = _____
12. 3.58 + 28.846 = _____
13. 7.92 + 0.084 = _____
14. 44.88 + 35.113 = _____
15. 1.077 + 0.034 = _____
16. 3.06 + 0.863 = _____
17. 9.4 + 0.762 = _____
18. 3.998 + 65.462 = _____
19. 14.45 + 7 + 48.602 = _____
20. 67.462 + 16.82 + 2.008 = _____

Add Decimals—Repeated Reasoning

Name: _____

Use patterns and mental math to add.

Set A

1. 1.999 + 0.001 = _____
2. 1.999 + 0.002 = _____
3. 1.999 + 0.003 = _____
4. 1.998 + 0.002 = _____
5. 1.998 + 0.003 = _____
6. 1.998 + 0.004 = _____
7. 1.997 + 0.003 = _____
8. 1.997 + 0.004 = _____
9. 1.997 + 0.005 = _____

Set B

1. 2.007 + 0.003 = _____
2. 2.008 + 0.003 = _____
3. 2.009 + 0.003 = _____
4. 2.008 + 0.002 = _____
5. 2.009 + 0.002 = _____
6. 2.010 + 0.002 = _____
7. 2.009 + 0.001 = _____
8. 2.010 + 0.001 = _____
9. 2.011 + 0.001 = _____

Describe a pattern you see in one of the sets of problems above.

_____

_____

_____

Subtract Decimals—Skills Practice

Name: _____

Subtract. **Form A**

1. 0.09 − 0.072 = _____
2. 82.456 − 50.03 = _____
3. 53.5 − 0.094 = _____
4. 12.091 − 0.132 = _____
5. 0.8 − 0.341 = _____
6. 54.784 − 23.8 = _____
7. 25.76 − 4.213 = _____
8. 27.261 − 18 = _____
9. 10.002 − 0.004 = _____
10. 6.365 − 0.245 = _____
11. 4.598 − 2.46 = _____
12. 36.7 − 0.062 = _____
13. 68 − 6.218 = _____
14. 18.25 − 6.342 = _____
15. 1.087 − 0.3 = _____
16. 0.076 − 0.02 = _____
17. 48.1 − 9.354 = _____
18. 56.285 − 7.293 = _____
19. 2.89 − 0.089 = _____
20. 82.138 − 6.4 = _____
21. 21.98 − 13.761 = _____

Subtract Decimals—Skills Practice

Name: _____

Subtract. **Form B**

1. 0.08 − 0.067 = _____
2. 94.281 − 40.05 = _____
3. 42.5 − 0.083 = _____
4. 14.082 − 0.243 = _____
5. 0.9 − 0.426 = _____
6. 76.892 − 34.9 = _____
7. 35.87 − 3.435 = _____
8. 28.831 − 19 = _____
9. 10.006 − 0.009 = _____
10. 8.496 − 0.356 = _____
11. 7.792 − 3.66 = _____
12. 32.8 − 0.074 = _____
13. 63 − 2.453 = _____
14. 14.36 − 2.538 = _____
15. 1.092 − 0.4 = _____
16. 0.084 − 0.06 = _____
17. 52.1 − 4.463 = _____
18. 52.156 − 5.163 = _____
19. 3.78 − 0.078 = _____
20. 96.286 − 7.8 = _____
21. 23.94 − 15.358 = _____

Subtract Decimals—Repeated Reasoning

Name: _____

Use patterns and mental math to subtract.

Set A

1. $8 - 0.1 =$ _____
2. $8 - 0.2 =$ _____
3. $8 - 0.3 =$ _____
4. $18 - 0.1 =$ _____
5. $18 - 0.2 =$ _____
6. $18 - 0.3 =$ _____
7. $108 - 0.1 =$ _____
8. $108 - 0.2 =$ _____
9. $108 - 0.3 =$ _____

Set B

1. $20 - 0.01 =$ _____
2. $20 - 0.02 =$ _____
3. $20 - 0.03 =$ _____
4. $20 - 1.01 =$ _____
5. $20 - 1.02 =$ _____
6. $20 - 1.03 =$ _____
7. $20 - 2.01 =$ _____
8. $20 - 2.02 =$ _____
9. $20 - 2.03 =$ _____

Describe a pattern you see in one of the sets of problems above.

_____

_____

_____

Multiply Decimals—Skills Practice

Name: _____

Multiply.

Form A

1 2.1×0.76

2 52.4×4.5

3 4.52×8.9

4 5.8×7.4

5 0.97×0.23

6 63.52×4.7

7 2.7×0.25

8 8.35×0.46

9 0.813×4.6

10 0.83×5.8

11 12.3×6.5

12 0.78×42.5

13 912.5×0.85

14 3.6×8.14

15 0.64×31.8

16 5.6×21.42

Multiply Decimals—Skills Practice

Name: _____

Multiply.

Form B

1 4.1×0.87

2 65.5×3.2

3 0.65×3.9

4 0.924×6.2

5 34.78×0.12

6 7.65×0.28

7 0.69×0.34

8 36.25×7.3

9 0.65×24.6

10 73.8×42.9

11 21.4×5.6

12 6.28×3.65

13 2.5×7.39

14 691.5×0.75

15 0.43×61.5

16 7.8×34.16

Multiply Decimals—Repeated Reasoning

Name: _____

Find patterns in multiplying decimals.

Set A

1. $0.1 \times 0.3 =$ _____
2. $0.1 \times 0.6 =$ _____
3. $0.2 \times 0.3 =$ _____
4. $0.2 \times 0.6 =$ _____
5. $0.4 \times 0.3 =$ _____
6. $0.4 \times 0.6 =$ _____
7. $0.8 \times 0.3 =$ _____
8. $0.8 \times 0.6 =$ _____
9. $1.6 \times 0.3 =$ _____
10. $1.6 \times 0.6 =$ _____
11. $3.2 \times 0.3 =$ _____
12. $3.2 \times 0.6 =$ _____

Set B

1. 34.5×5
2. 34.5×0.5
3. 34.5×0.05
4. 34.5×0.005
5. 3.45×5
6. 3.45×0.5
7. 3.45×0.05
8. 3.45×0.005
9. 0.345×5
10. 0.345×0.5
11. 0.345×0.05
12. 0.345×0.005

Describe a pattern you see in one of the sets of problems above.

_____

_____

_____

Divide Decimals—Skills Practice

Name: _____

Divide.

Form A

1 $0.08\overline{)3.84}$

2 $0.16\overline{)6.08}$

3 $5.9\overline{)2.183}$

4 $112.5\overline{)7.2}$

5 $614.5\overline{)3.687}$

6 $2.68\overline{)9.648}$

7 $5.9\overline{)10.62}$

8 $2.6\overline{)137.8}$

9 $1.486\overline{)66.87}$

10 $2.357\overline{)68.353}$

11 $2.85\overline{)267.9}$

12 $0.368\overline{)33.856}$

13 $1.125\overline{)240.3}$

14 $0.3\overline{)8.37}$

15 $0.008\overline{)2.3}$

16 $0.36\overline{)0.621}$

Divide Decimals—Skills Practice

Name: _____

Divide.

Form B

1 $0.04\overline{)2.24}$

2 $0.18\overline{)7.56}$

3 $0.9\overline{)3.69}$

4 $5.6\overline{)5.152}$

5 $114.5\overline{)3.206}$

6 $2.8\overline{)16.52}$

7 $2.56\overline{)8.192}$

8 $217.5\overline{)18.27}$

9 $812.5\overline{)6.5}$

10 $1.276\overline{)82.94}$

11 $6.95\overline{)375.3}$

12 $3.689\overline{)99.603}$

13 $3.225\overline{)566.31}$

14 $56.25\overline{)7.2}$

15 $0.734\overline{)60.922}$

16 $0.8\overline{)0.856}$

Divide Decimals—Repeated Reasoning

Name: _____

Compare dividends and quotients to find patterns.

Set A

1. $0.5\overline{)2}$
2. $0.5\overline{)4}$
3. $0.5\overline{)8}$
4. $0.5\overline{)20}$
5. $0.5\overline{)40}$
6. $0.5\overline{)80}$
7. $0.5\overline{)200}$
8. $0.5\overline{)400}$
9. $0.5\overline{)800}$

Set B

1. $1 \div 0.2 =$ _____
2. $2 \div 0.2 =$ _____
3. $3 \div 0.2 =$ _____
4. $10 \div 0.2 =$ _____
5. $20 \div 0.2 =$ _____
6. $30 \div 0.2 =$ _____
7. $100 \div 0.2 =$ _____
8. $200 \div 0.2 =$ _____
9. $300 \div 0.2 =$ _____

Describe a pattern you see in one of the sets of problems above.

_____

_____

_____

Greatest Common Factors—Skills Practice

Name: _____

Find the greatest common factor. **Form A**

1. 24 and 20: _____
2. 36 and 42: _____
3. 16 and 32: _____
4. 12 and 8: _____
5. 80 and 70: _____
6. 50 and 14: _____
7. 100 and 75: _____
8. 15 and 18: _____
9. 14 and 21: _____
10. 40 and 60: _____
11. 25 and 45: _____
12. 33 and 77: _____
13. 36 and 81: _____
14. 64 and 40: _____
15. 35 and 28: _____
16. 17 and 34: _____
17. 15 and 28: _____
18. 3 and 69: _____
19. 18 and 28: _____
20. 27 and 63: _____
21. 20 and 45: _____
22. 54 and 24: _____
23. 18 and 45: _____
24. 72 and 64: _____

Greatest Common Factors—Skills Practice

Name: _____

Find the greatest common factor. **Form B**

1. 21 and 28: _____
2. 50 and 75: _____
3. 15 and 30: _____
4. 6 and 9: _____
5. 60 and 80: _____
6. 16 and 40: _____
7. 30 and 48: _____
8. 12 and 18: _____
9. 16 and 24: _____
10. 40 and 90: _____
11. 44 and 24: _____
12. 26 and 16: _____
13. 12 and 25: _____
14. 7 and 42: _____
15. 35 and 55: _____
16. 44 and 99: _____
17. 27 and 72: _____
18. 13 and 39: _____
19. 45 and 81: _____
20. 40 and 25: _____
21. 20 and 42: _____
22. 120 and 70: _____
23. 22 and 77: _____
24. 72 and 63: _____

Least Common Multiples—Skills Practice

Name: _____

Find the least common multiple. **Form A**

1. 4 and 7: _____
2. 5 and 6: _____
3. 3 and 8: _____
4. 4 and 6: _____
5. 6 and 9: _____
6. 10 and 6: _____
7. 2 and 8: _____
8. 3 and 4: _____
9. 5 and 7: _____
10. 8 and 9: _____
11. 12 and 8: _____
12. 8 and 10: _____
13. 9 and 7: _____
14. 2 and 11: _____
15. 6 and 12: _____
16. 11 and 9: _____
17. 9 and 4: _____
18. 3 and 6: _____
19. 5 and 9: _____
20. 11 and 8: _____
21. 10 and 5: _____
22. 13 and 39: _____
23. 4 and 16: _____
24. 7 and 6: _____

Least Common Multiples—Skills Practice

Name: _____

Find the least common multiple. **Form B**

1. 4 and 5: _____
2. 2 and 6: _____
3. 3 and 11: _____
4. 7 and 6: _____
5. 12 and 9: _____
6. 10 and 12: _____
7. 8 and 12: _____
8. 5 and 8: _____
9. 3 and 5: _____
10. 4 and 9: _____
11. 10 and 3: _____
12. 6 and 4: _____
13. 7 and 8: _____
14. 2 and 9: _____
15. 4 and 11: _____
16. 8 and 4: _____
17. 3 and 7: _____
18. 9 and 3: _____
19. 4 and 10: _____
20. 5 and 11: _____
21. 12 and 2: _____
22. 7 and 28: _____
23. 8 and 6: _____
24. 21 and 3: _____

Exponents—Skills Practice

Name: _____

Evaluate the expression. **Form A**

1 $5^2 =$ _____

2 $3^2 + 7^2 =$ _____

3 $4^2 \times 3^3 =$ _____

4 $2^3(4^3 + 6^2) =$ _____

5 $7^3 =$ _____

6 $4^4(1^8 + 2^2) =$ _____

7 $4^3 + 5^4 =$ _____

8 $\frac{9^2 - 7^2}{2^4} =$ _____

9 $8^3 =$ _____

10 $3^5 + 2^7 =$ _____

11 $9^2 =$ _____

12 $2^6 - 3^3 =$ _____

13 $\frac{10^2 + 3^2}{1^{13}} =$ _____

14 $3^4 =$ _____

15 $\frac{6^2 - 2^5}{2^2} =$ _____

16 $5^3 - 2^3 =$ _____

17 $8^2 \times 6^2 =$ _____

18 $\frac{3^3 + 6^2}{3^2} =$ _____

19 $2^5 =$ _____

20 $\frac{10^3}{2^2 + 6^2} =$ _____

21 $6^3 =$ _____

Exponents—Skills Practice

Name: _____

Evaluate the expression. **Form B**

1 $6^2 =$ _____

2 $4^2 + 8^2 =$ _____

3 $5^2 \times 3^3 =$ _____

4 $3^2(9^2 + 2^4) =$ _____

5 $9^3 =$ _____

6 $2^3(7^3 + 1^9) =$ _____

7 $5^3 + 3^5 =$ _____

8 $\frac{6^2 - 3^2}{3^3} =$ _____

9 $4^3 =$ _____

10 $2^5 + 7^3 =$ _____

11 $8^2 =$ _____

12 $3^4 - 2^4 =$ _____

13 $\frac{9^2 + 10^3}{1^{12}} =$ _____

14 $7^4 =$ _____

15 $\frac{10^2 - 8^2}{3^2} =$ _____

16 $4^4 - 5^2 =$ _____

17 $7^2 \times 9^2 =$ _____

18 $\frac{6^2 + 8^2}{5^2} =$ _____

19 $2^6 =$ _____

20 $\frac{10^4}{8^2 + 4^2} =$ _____

21 $4^5 =$ _____

Exponents—Repeated Reasoning

Name: _____

Look for patterns in expressions with exponents.

Set A

1. $10^2 \times 10^1 =$ _____
2. $10^2 \times 10^2 =$ _____
3. $10^2 \times 10^3 =$ _____
4. $10^3 \times 10^1 =$ _____
5. $10^3 \times 10^2 =$ _____
6. $10^3 \times 10^3 =$ _____
7. $10^4 \times 10^1 =$ _____
8. $10^4 \times 10^2 =$ _____
9. $10^4 \times 10^3 =$ _____

Set B

1. $\frac{10^7}{10} =$ _____
2. $\frac{10^7}{10^2} =$ _____
3. $\frac{10^7}{10^3} =$ _____
4. $\frac{10^8}{10} =$ _____
5. $\frac{10^8}{10^2} =$ _____
6. $\frac{10^8}{10^3} =$ _____
7. $\frac{10^9}{10} =$ _____
8. $\frac{10^9}{10^2} =$ _____
9. $\frac{10^9}{10^3} =$ _____

Describe a pattern you see in one of the sets of problems above.

_____

_____

_____

Order of Operations—Skills Practice

Name: _____

Evaluate the expression.

Form A

1 $7 + 6 \times 2 =$ _____

2 $0.25 \times 16 + 4 =$ _____

3 $26 - 3 \times 4 =$ _____

4 $18 + 14 \times 0.5 =$ _____

5 $18 \div 2 + 7 =$ _____

6 $8 + 6 \times 3^2 =$ _____

7 $18 - 8^2 \div 4 =$ _____

8 $12 - 8 \times 0.25 =$ _____

9 $9 + 25 \div 5^2 =$ _____

10 $6^2 \div 9 + 3 =$ _____

11 $48 \div 0.5 + 2 =$ _____

12 $42 + 0.2 \times 30 =$ _____

13 $36 \div 3 \times 4 =$ _____

14 $131 - 4 \times 2^3 =$ _____

15 $56 - 0.3 \times 40 =$ _____

16 $32 - 8 + 11 =$ _____

17 $96 \div 2^4 + 32 =$ _____

18 $35 - 0.5 \times 56 =$ _____

19 $10^2 \div 5 \times 4 =$ _____

20 $3^3 + 18 \div 3 =$ _____

Order of Operations—Skills Practice

Name: _____

Evaluate the expression.

Form B

1. $8 + 7 \times 2 =$ _____
2. $0.4 \times 20 + 5 =$ _____
3. $34 - 4 \times 8 =$ _____
4. $26 + 12 \times 0.5 =$ _____
5. $24 \div 2 + 6 =$ _____
6. $6 + 5 \times 4^2 =$ _____
7. $18 - 6^2 \div 3 =$ _____
8. $16 - 12 \times 0.25 =$ _____
9. $4 + 9 \div 3^2 =$ _____
10. $8^2 \div 2 + 6 =$ _____
11. $26 \div 0.5 + 6 =$ _____
12. $54 + 0.2 \times 60 =$ _____
13. $54 \div 6 \times 3 =$ _____
14. $191 - 2 \times 3^4 =$ _____
15. $48 - 0.3 \times 30 =$ _____
16. $46 - 7 + 14 =$ _____
17. $72 \div 2^3 + 1 =$ _____
18. $41 - 0.5 \times 46 =$ _____
19. $6^2 \div 9 \times 2 =$ _____
20. $4^3 + 32 \div 8 =$ _____

Evaluate Expressions with Variables—Skills Practice

Name: _____

Evaluate the expression.

Form A

1 $s = 7; 6s^2 =$ _____

2 $x = 3; 4x^3 + 2 =$ _____

3 $n = \frac{1}{8}; \frac{2}{n} =$ _____

4 $x = \frac{1}{6}; 18x + 4 =$ _____

5 $x = 7; \frac{4x + 8}{2} =$ _____

6 $p = 0.5; 42 - 42p =$ _____

7 $x = 0.25; 48x - 3 =$ _____

8 $a = 3; a^3 =$ _____

9 $y = 84; \frac{y}{4} - 15 =$ _____

10 $c = 35; \frac{9c}{5} + 32 =$ _____

11 $n = 0.5; \frac{8}{n} + 8 =$ _____

12 $x = 3; 169 - 2x^4 =$ _____

13 $a = 3; 12a^2 =$ _____

14 $w = \frac{1}{5}; 38 - 15w =$ _____

15 $x = 9; 8x + 3 =$ _____

16 $m = 2; \frac{16}{2m} =$ _____

17 $x = 7; x^2 - 5^2 =$ _____

18 $p = 25; \frac{p}{100}(120) =$ _____

Evaluate Expressions with Variables—Skills Practice

Name: _____

Evaluate the expression. **Form B**

1 $s = 8; 6s^2 =$ _____

2 $x = 2; 7x^3 + 4 =$ _____

3 $n = \frac{1}{6}; \frac{4}{n} =$ _____

4 $x = \frac{1}{3}; 12x + 7 =$ _____

5 $x = 8; \frac{6x + 9}{3} =$ _____

6 $p = 0.2; 20 - 20p =$ _____

7 $x = 2; 78 - 4x^3 =$ _____

8 $a = 2; a^3 =$ _____

9 $y = 96; \frac{y}{6} - 12 =$ _____

10 $c = 45; \frac{9c}{5} + 32 =$ _____

11 $n = 0.5; \frac{12}{n} + 15 =$ _____

12 $x = 2; 24x \div 6 =$ _____

13 $a = 6; 5a^2 =$ _____

14 $w = \frac{1}{2}; 46 - 4w =$ _____

15 $x = 7; 9x + 4 =$ _____

16 $m = 3; \frac{30}{5m} =$ _____

17 $x = 9; x^2 - 7^2 =$ _____

18 $p = 50; \frac{p}{100}(460) =$ _____

Equivalent Expressions—Skills Practice

Name: _____

Use the distributive property to write an equivalent expression. **Form A**

1 $5x + 20 =$ _____

2 $3(x + 6) =$ _____

3 $8(4n + 3) =$ _____

4 $7x - 35 =$ _____

5 $12x - 6 =$ _____

6 $20p + 16 =$ _____

7 $9(2x + 9) =$ _____

8 $5(6 + 13a) =$ _____

9 $36 + 9y =$ _____

10 $6(c + 8) =$ _____

11 $7(n - 3) =$ _____

12 $2(12 + 10x) =$ _____

13 $21 + 15a =$ _____

14 $4(5 - 4w) =$ _____

15 $32 - 12x =$ _____

16 $10(2m - 7) =$ _____

17 $8 + 36x =$ _____

18 $11(6 + 4p) =$ _____

19 $25(4n + 8) =$ _____

20 $20w + 30 =$ _____

Equivalent Expressions—Skills Practice

Name: _____

Use the distributive property to write an equivalent expression. **Form B**

1 $6x + 18 =$ _____

2 $4(x + 7) =$ _____

3 $9(3n + 5) =$ _____

4 $4x - 32 =$ _____

5 $15x - 5 =$ _____

6 $30p + 18 =$ _____

7 $8(3x + 7) =$ _____

8 $7(9 + 12a) =$ _____

9 $42 + 6y =$ _____

10 $3(c + 4) =$ _____

11 $5(n - 8) =$ _____

12 $6(5 + 9x) =$ _____

13 $24 + 18a =$ _____

14 $11(8 - 6w) =$ _____

15 $42 - 36x =$ _____

16 $25(10m + 3) =$ _____

17 $6 + 14x =$ _____

18 $10(3p - 4) =$ _____

19 $2(7n + 6) =$ _____

20 $40w + 70 =$ _____

Solving Equations—Skills Practice

Name: _____

Solve the equation. **Form A**

1 $x + 24 = 36; x =$ _____

2 $5 = 6y; y =$ _____

3 $\frac{5}{3} + x = 2; x =$ _____

4 $7w = 28; w =$ _____

5 $\frac{9}{5} = 1 + m; m =$ _____

6 $0.5x = 14; x =$ _____

7 $\frac{7}{2} = 4x; x =$ _____

8 $215 + p = 230; p =$ _____

9 $\frac{5}{6}x = 20; x =$ _____

10 $x + 32 = 45; x =$ _____

11 $c + \frac{2}{5} = 2; c =$ _____

12 $0.2 + x = 3; x =$ _____

13 $9 = 4y; y =$ _____

14 $x + 0.8 = 4.3; x =$ _____

15 $56 + n = 97; n =$ _____

16 $39 = 17 + x; x =$ _____

17 $0.6 + w = 4; w =$ _____

18 $9y = 189; y =$ _____

Solving Equations—Skills Practice

Name: _____

Solve the equation.

Form B

1 $x + 26 = 39; x =$ _____

2 $4 = 5y; y =$ _____

3 $\frac{7}{3} + x = 3; x =$ _____

4 $8w = 48; w =$ _____

5 $\frac{7}{4} = 1 + m; m =$ _____

6 $0.5x = 18; x =$ _____

7 $\frac{5}{2} = 3x; x =$ _____

8 $225 + p = 260; p =$ _____

9 $\frac{3}{4}x = 24; x =$ _____

10 $x + 41 = 63; x =$ _____

11 $c + \frac{2}{3} = 4; c =$ _____

12 $0.4 + x = 4; x =$ _____

13 $7 = 6y; y =$ _____

14 $x + 0.5 = 3.7; x =$ _____

15 $48 + n = 79; n =$ _____

16 $43 = 11 + x; x =$ _____

17 $0.8 + w = 5; w =$ _____

18 $4y = 248; y =$ _____