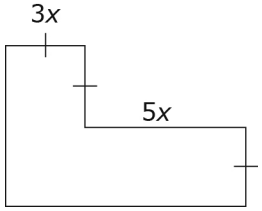
Chapter 8 Warm-Up

Section 8.1

1. Determine the area of the figure.



2. Solve: $\frac{-15x^2}{10x}$

3. Divide $\frac{2}{3}xy$ by $5x$.

4. Expand $-3x(2x - 5y + 7)$

5. What is $8x^2 - 24x$ divided by $4x$?

Mental Math

6. Evaluate: $-\frac{3}{4}+\frac{1}{6}$

7. Evaluate: $1\frac{3}{5}\div\left(-\frac{3}{7}\right)$

8. Calculate: $(-0.2) + (-3.4) \div (17)$

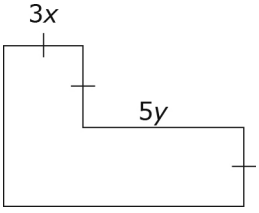
9. If the length of a rectangle is 5.2 cm long and the width is 4.8 cm long, what is the area?

10. You commit to saving 15% every time you are paid. You make $230 in one week. How much should you transfer to your savings account each week?

Section 8.2

1. The area of a rectangle is $15xy$. If the length is $5y$, what is the width?

2. Write a simplified expression for the area of this figure.



3. Solve for x: $-\frac{5}{8}x=\frac{2}{3}$

4. Solve for m: $-3.77 = -1.3m$

5. Solve for y: $\frac{5}{y}=1.6$

Mental Math

6. What is $\frac{3}{5}-\frac{1}{10}$?

7. What is the sum of $-1\frac{3}{4}$ and $\frac{1}{2}$?

8. Evaluate: $2.8(-3.7 - 2.5)$

9. What is the result if you subtract 4.95 from 18.95, then divide the difference by -0.5?

10. A small pizza costs $8.50. Extra toppings cost $0.50 each. How much does a small pizza cost if you want three extra toppings?

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BLM 8–3
(continued)

Section 8.3

1. Solve for n: $-2\frac{1}{5} = \frac{3}{n}$

2. A roll of dimes is worth \$5. Write and solve an equation to determine the number of dimes in a roll.

3. Solve for x: $\frac{x}{3} + \frac{5}{6} = \frac{2}{3}$

4. Solve for x: $\frac{3}{4} = -2x + \frac{1}{5}$

5. Solve for x: $2.5 - 0.2x = -3.9$

Mental Math

6. Evaluate: $\left(\frac{3}{10} - \frac{2}{5}\right) \div 2$

7. Find the product of 3 and $2x - 5$.

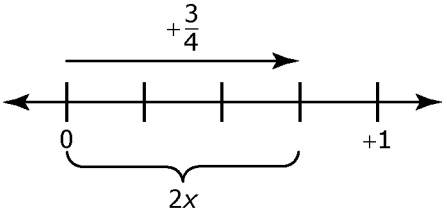
8. Expand: $-\frac{2}{3}\left(\frac{x}{5} - 4\right)$

9. A number that has been increased by 5 is then multiplied by 3. The result is 24. What is the number?

10. Double the sum of 2 and another number is −18. What is the other number?

Section 8.4

1. a) Write an equation that is represented by this model.



b) Solve your equation.

2. Solve, expressing your answer to the nearest hundredth:
$\frac{35.9}{n} = -76.4$

3. Solve: $-3x + \frac{3}{8} = -\frac{1}{4}$

4. Solve: $1.5(x - 3.2) = 5.7$

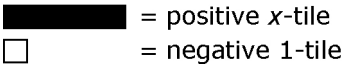
5. Concert tickets are for sale online. There is a handling fee of \$3.50 added to the cost of every ticket. If you buy seven tickets and the total comes to \$385, what is the cost of one ticket before the handling fee is added?

Mental Math

6. Collect like terms:
$3x - 7 - 5x - 9$

7. Evaluate: $-\frac{2}{5}p + \frac{2}{3}p$

8. Write an expression that is the opposite of the one represented.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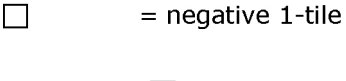
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9. Expand: $4\left(\frac{1}{7}x - \frac{1}{5}\right)$

10. Expand: $-0.25(7x - 4)$