

Do Now: Check your answers to the review.

- | | |
|----------------|-------------------------|
| 1. $n = -33$ | 11. $x = 6$ |
| 2. $n = -2$ | Perimeter = 36 units |
| 3. $x = 51/7$ | 12. \$0.50 |
| 4. $x = 14$ | 13. $k = -3/2$ |
| 5. \$112 | 14. $p = -19/9$ |
| 6. 90 green | 15. $q = 7/44$ |
| 30 yellow | 16. $m = 0.04$ |
| 7. $b = 18$ | 17. $e = -1.04$ |
| 8. $x = -3$ | 18. $a = 7.45$ |
| 9. $c = -21/4$ | 19. 3.5 pounds of each |
| 10. $k = -1/3$ | 20. More than 33 videos |

Do Now: Do not copy. Write an equation and solve.

One video rental club charges \$25 to become a member and \$2.50 to rent each video. Another charges no membership fee, but charges \$3.25 to rent each video. How many videos must you rent to make the first club more economical?

Membership = Non-membership *more money*

$r = 33.3$

$$25 + 2.50r = 3.25r$$

$$25 + 2.50(33) = 3.25(33)$$

$$25 + \$82.5 = \$107.25$$

$$25 + \$80 = \$105$$

33 videos
34 videos

You must rent 33 videos to make the first club more economical.

Answers to the Workbook

8. -6.2

10. 4.3

11. -5/2

12. 44/39

15. \$2.15; \$37.65

19. 25/227

$-234f - 25 = 7f$

5. During a sale, a tire store is offering \$40 off the price of a second tire when one tire is purchased for full price. A customer paid \$184 for two tires during the sale. What is the regular price of one tire, in dollars?

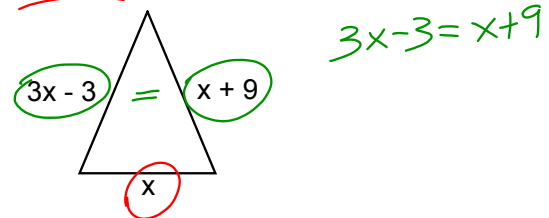
Tire 1 = x
Tire 2 = $x - 40$
Total = \$184

Tire 1 + Tire 2 = Total
 $x + x - 40 = 184$

6. You have a total of 120 marbles. Each marble is either green or yellow. You have three times as many green marbles as yellow marbles. How many green marbles do you have? How many yellow marbles do you have?

$$\begin{aligned} \text{Green marbles} &= 3x & \text{Green} + \text{Yellow} &= \text{Total} \\ \text{Yellow marbles} &= x & 3x + x &= 120 \\ \text{Total} &= 120 \end{aligned}$$

11. A triangle is isosceles if it has two sides with the same length. Find the value of x so that the triangle is isosceles. Then find the perimeter. (Diagram not drawn to scale.)



12. You are buying a bagel for a brunch. The bagels cost \$4 a dozen, but cost more if bought individually. You can buy 4 dozen and 8 singles for the same price as 40 singles. How much is a single bagel?

Variable

$$\begin{aligned} \text{Dozen} + \text{Single} &= \text{Single Only} \\ 4(4) + 8x &= 40x \end{aligned}$$

19. At a store tangerines cost \$1.28 per pound, and nectarines cost \$2.18 per pound. You buy the same amount of each and spend \$12.11. How much did you buy of each?

variable (pounds)

$$\begin{aligned} \text{Total} &= 12.11 \\ \text{Tangerines} &= 1.28p & \text{Tangerines} + \text{Nectarines} &= \text{Total} \\ \text{Nectarines} &= 2.18p & 1.28p + 2.18p &= 12.11 \end{aligned}$$

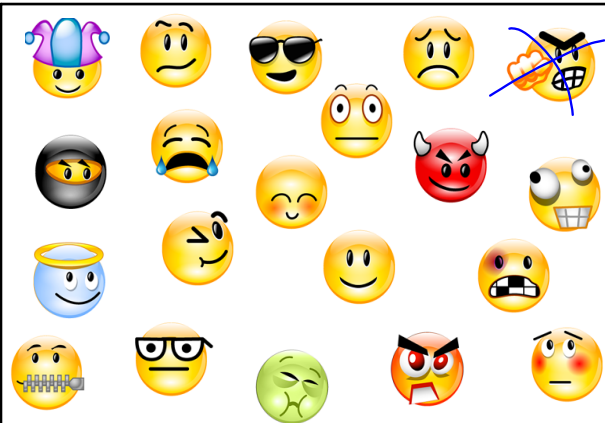
20. One video rental club charges \$25 to become a member and \$2.50 to rent each video. Another charges no membership fee, but charges \$3.25 to rent each video. How many videos must you rent to make the first club more economical?

Quiz Review 6.1-6.3

7.NS
7.EE

- SWBAT solve multi-step equations, involving variables on both sides.
- SWBAT represent and analyze situations using algebraic symbols.

Calculators: Yes



#1



#2



#3



#4



#5



#6



#7



#8



#9



#10



#11

$$\begin{array}{r} 3(6)-3 \\ 18-3 \\ \hline 15 \end{array}$$



$$\begin{array}{r} 6+9 \\ \hline 15 \end{array}$$

$$\begin{array}{r} 15+15+6 \\ \hline 36 \end{array}$$



#12



#13



#14



#15



#16



#17



#18



#19



#20

