Name: Key

Chapter 4 Study Guide

Calculate:

1. $15 + -3 - 2$ = 10

2. $-3 + +2 + (+10)$ = 9

3. $\frac{1}{2} - \frac{3}{2} + \frac{4}{2}$ =

4. $7\frac{1}{5} - 2\frac{3}{5}$

$6\frac{1}{5}$ (+5)

$-2\frac{3}{5}$

$4\frac{3}{5}$

5. Solve the equation. Show your steps!

$23 + x = 15 + 16$

$23 + x = 31$

$-23 \quad -23$

$0 + x = 8$

$x = 8$

6. Sue bought jeans for $29.99 and a sweater for $18.99. She paid with a 100 dollar bill. How much change did she receive?

$29.99 + 18.99 = 48.98$

$100 - 48.98 = 51.02$

$51.02

7. There was a 70% chance of rain on Monday and a 37% chance of rain on Tuesday. How much more likely was it to rain on Monday than on Tuesday?

$70\% - 37\% = 33\%$

8. If the number of cell phones in the U.S. increases by 1.5 million each year, and there were about 135 million cell phones in the U.S. in 2005, about how many phones were there in **2062?**

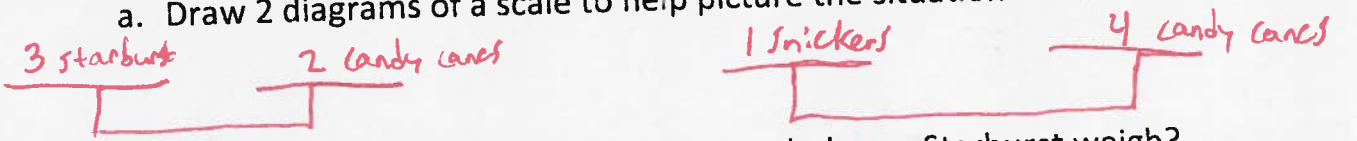
130.5 million

9. Sam rides bike about 57 miles each week. Mark rides his bike 10.3 miles each day for 5 days a week. Who rides farther during the week, and by how much? $5 \times 10.3 = 51.5$ Sam rides farther by 5.5 miles

$$\begin{array}{r} 57 \\ -51.5 \\ \hline 5.5 \end{array}$$

10. Three Starburst weight as much as two candy canes. Four candy canes weight as much as one Snickers bar.

a. Draw 2 diagrams of a scale to help picture the situation above.



b. If a Snickers weighs 12 ounces, how much does a Starburst weigh?

2 oz

c. How much does one candy cane weigh?

12 oz = 4 candy canes

3 oz = 1 candy cane

Fill in the blanks.

11. $x + -3 = x +$ 3

12. $-p - -t - s =$ $-p$ + t + $-s$

13. Solve for m: $m - 90\frac{1}{2} = -110\frac{3}{4}$ →

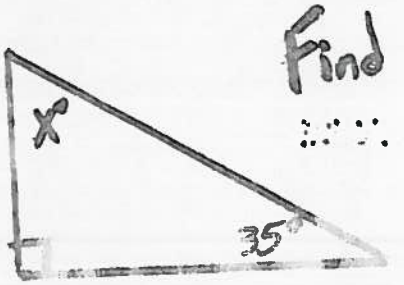
$m - 90\frac{1}{2} = -110\frac{3}{4}$

$+ 90\frac{1}{2} \quad + 90\frac{1}{2}$

$m + 0 = -20\frac{1}{4}$

$m = -20\frac{1}{4}$ or -20.25

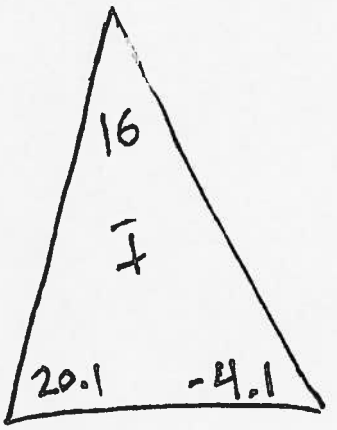
14. Find the measure of X.



$X = 55°$

$$\begin{array}{r} 35 \\ +90 \\ \hline 125 \end{array} \qquad \begin{array}{r} 180 \\ -125 \\ \hline 55 \end{array}$$

15.



Four related facts

$16 - 20.1 = -4.1$

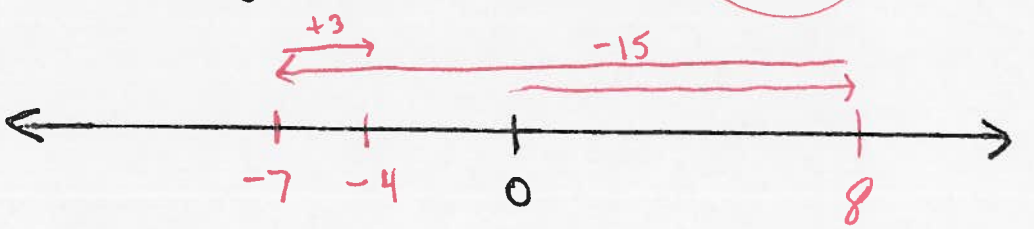
$16 - -4.1 = 20.1$

$20.1 + -4.1 = 16$

$-4.1 + 20.1 = 16$

16. Show on a number line.

$8 - 15 + +3 = -4$



17. Which angle has the same measure as $\angle MOR$?

$\angle MON$, $\angle NOQ$, $\angle ROQ$

18. Name 2 supplementary angles.

Ex: $\angle MON$ and $\angle NOQ$

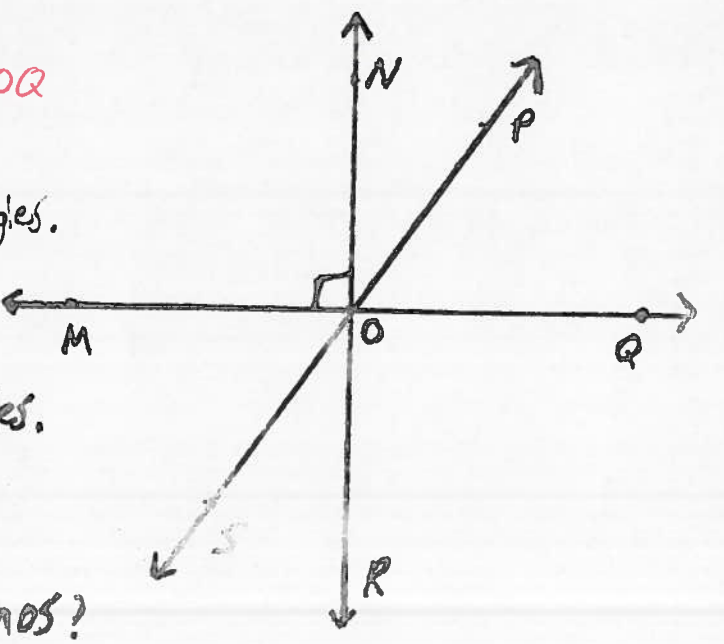
Lots of correct answers!!

19. Name 2 complementary angles.

$\angle NOP$ and $\angle POQ$

or

$\angle MOS$ and $\angle SOR$



20. What type of angle is $\angle MOS$?

Acute