

HW: Worksheet

Warm up:

Tom has five dollars less than six times as much as Peter. If Tom has \$253, how much money does Peter have?

\$43

$$\begin{array}{r} 6p - 5 = 253 \\ + 5 \quad + 5 \\ \hline 6p = 258 \\ \hline p = 43 \end{array}$$

A boat is traveling as a speed of 32 mi/h. How long will it take for the boat to travel 544 miles?

$$\frac{32x = 544}{32 \quad 32}$$
$$x = 17$$

17h

Ron wants to buy a computer for \$850 and has \$114 saved up. If he makes \$8/hr, how long will it take him to save up enough money for the computer?

$$\begin{array}{r} 850 = 8h + 114 \\ -114 \qquad \qquad -114 \\ \hline 736 = 8h \\ \frac{736}{8} = \frac{8h}{8} \\ \hline 92 = h \end{array}$$

$92h$

Best Buy has printers on sale for \$93 and packages of paper on sale for \$3. If Brianna has \$156 and buys a printer, how many packages of paper can she buy?

$$\begin{array}{r} 93 + 3x = 156 \\ -93 \qquad \qquad -93 \\ \hline 3x = 63 \\ \underline{\quad 3} \quad \underline{\quad 3} \\ x = 21 \end{array}$$

21 packages of paper

1) 331 students went on a field trip. Six buses were filled and 7 students traveled in cars. How many students were in each bus?

2) Aliyah had \$24 to spend on seven pencils. After buying them she had \$10. How much did each pencil cost?

3) On a farm, there are 20 fewer cows than twice the number of pigs. If there are 50 cows, how many pigs are there?

4) Ellie wants to buy a Zorb for \$5,000. She has \$604 saved up and earns \$628 per week. How many weeks will she need to work until she can buy the Zorb?

5) A cell phone company charges a monthly rate of \$12.15 and \$0.25 per minute to make calls. Craig's bill this month is \$21.90. How many minutes did he use?

6) A tree grows 2 inches each week. If the tree is currently 40 inches tall, how long will it take for the tree to reach a height of 30 feet?

1) 331 students went on a field trip. Six buses were filled and 7 students traveled in cars. How many students were in each bus?

$$6x + 7 = 331$$

$$\begin{array}{r} 6x + 7 = 331 \\ -7 \quad -7 \\ \hline 6x = 324 \\ \frac{6}{6} \quad \frac{6}{6} \\ \hline x = 54 \end{array}$$

54 students

2) Aliyah had \$24 to spend on seven pencils. After buying them she had \$10. How much did each pencil cost?

$$\begin{array}{r} 10 + 7x = 24 \\ -10 - 10 \\ \hline 7x = 14 \\ \\ \\ \hline x = 2 \end{array}$$

$$24 - 7p = 10$$

\$2

3) On a farm, there are 20 fewer cows than twice the number of pigs. If there are 50 cows, how many pigs are there?

$$\begin{array}{r} 2p - 20 = 50 \\ +20 \quad +20 \\ \hline 2p = 70 \\ - \frac{2p}{2} \quad - \frac{70}{2} \\ \hline p = 35 \\ \hline \text{35 pigs} \end{array}$$

4) Ellie wants to buy a Zorb for \$5,000. She has \$604 saved up and earns \$628 per week. How many weeks will she need to work until she can buy the Zorb?

$$5000 = 604 + 628x$$
$$\begin{array}{r} -604 \\ \hline \end{array}$$

$$\frac{4396}{628} = \frac{628x}{628}$$

$$7 = x$$

7 weeks

5) A cell phone company charges a monthly rate of \$12.15 and \$0.25 per minute to make calls. Craig's bill this month is \$21.90. How many minutes did he use?

$$\begin{array}{r} 12.15 + 0.25x = 21.90 \\ -12.15 \qquad \qquad \qquad -12.15 \\ \hline \end{array}$$

$$\begin{array}{r} 0.25x = 9.75 \\ \hline 0.25 \quad 0.25 \\ \hline x = 39 \end{array}$$

39 min

6) A tree grows 2 inches each week. If the tree is currently 40 inches tall, how long will it take for the tree to reach a height of 30 feet?

$$\begin{array}{r} 40 + 2x = 360 \\ - 40 \qquad - 40 \\ \hline \end{array}$$

$$\begin{array}{r} 2x = 320 \\ \underline{2} \qquad \underline{2} \\ \hline \end{array}$$

$$x = 160$$

160 weeks

Four less than half of a number is 17. Find the number.

$$\frac{1}{2}x - 4 = 17$$
$$+4 \quad +4$$

$$\frac{2}{1} \left(\frac{1}{2}x \right) = (21) \frac{2}{1}$$
$$x = 42$$

Two hundred twenty-five students play a team sport at Lincoln High School. These students represent $\frac{3}{8}$ of the total student population. How many students attend the school?

$$\frac{8}{3} (225) = \left(\frac{3}{8} \times \right) \frac{8}{3}$$