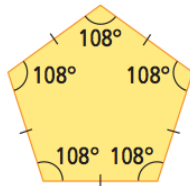


## Practice - Solving Equations: $ax = b$ , $x/a = b$ , $a/x = b$ (Day 2)

3. The length of Shamika's stride is 0.75 m. Both Amalia and Gustav were trying to calculate how many strides it would take Shamika to walk 30 m from her home to the bus stop.
- Amalia represented the situation with the equation  $0.75p = 30$ . Explain her thinking.
  - Gustav represented the situation with the equation  $\frac{30}{p} = 0.75$ . Explain his thinking.
  - Whose equation would you prefer to use? Explain.
15. Without solving the equation  $-\frac{5}{d} = -1.3$ , predict whether  $d$  is greater than or less than 0. Explain your reasoning.
16. The diameter,  $d$ , of a circle is related to the circumference,  $C$ , by the formula  $\frac{C}{d} = \pi$ . Calculate the diameter of a circle with a circumference of 54.5 cm. Express your answer to the nearest tenth of a centimetre.
17. A regular polygon has a perimeter of 34.08 cm and a side length of 5.68 cm. Identify the polygon.
19. A score of 17 on a math test results in a mark of 68%. What score would give you a mark of 100%?
21. Dianne spends 40% of her net income on rent and 15% of her net income on food. If she spends a total of \$1375 per month on rent and food, what is her net monthly income?
29. a) A jar contains equal numbers of nickels and dimes. The total value of the coins is \$4.05. How many coins are in the jar?  
b) A jar contains a mixture of nickels and dimes worth a total of \$4.75. There are three times as many nickels as dimes. How many dimes are there?

### Literacy Link

A *regular polygon* has equal sides and equal angles. For example, a regular pentagon has five equal sides. Each angle measures  $108^\circ$ .



### Answer Key:

15.  $d$  is greater than zero because the value of  $-\frac{5}{d}$  is negative. Therefore,  $d$  must be positive.
16.  $d = 17.4$  cm
17.  $n = 6$ , hexagon
19. A score of 25 would give a mark of 100%.
21. Her net monthly income is \$2500.
29. a) There are 54 coins in the jar.  
b) There are 19 dimes.