

## C: Dividing Integers Continued

### Examples:

1. Sam borrowed \$20 per month from his brother to pay for a video game console. When he bought the console he owed his brother \$260. How many months did he borrow money? ✓ indicates where you would receive a mark.

$$(+\$260) \div (+\$20) = +13 \checkmark$$

Sam borrowed money for 13 months. ✓

2. A diver collects water samples from a lake. He collected samples at 3m intervals starting at 3m below the surface. He collected the final sample at a depth of 24m. How many samples did he collect?

$$(-24) \div (-3) = +8 \checkmark$$

The diver collected 8 samples. ✓

3. A school spent \$5980 to buy 20 cameras. What was the cost of each camera? calculator?

$$(-\$5980) \div (-20) = +\$299 \quad \text{* long division}$$

$$20 \overline{) 5980} = \begin{array}{r} 299 \\ 2 \overline{) 5980} \\ \underline{-4} \phantom{0} \\ 19 \phantom{0} \\ \underline{-18} \phantom{0} \\ 18 \end{array}$$

Each camera cost \$299. ✓

4. If 56 times an integer is -896, what is the integer?

$$(-896) \div (+56) = -16$$

\* long division

$$\begin{array}{r} 16 \\ 56 \overline{) 896} \\ \underline{-56} \phantom{0} \\ 336 \\ \underline{-336} \\ 0 \end{array}$$

$$\begin{array}{r} 50 \times 6 = 300 \\ 50 \times 7 = 350 \\ \phantom{50} \times 6 = 30 \\ \hline 336 \checkmark \end{array}$$

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