

D: Applying Integer Operations Continued

Examples:

4. The mean of six integers is -12 . What is the sum of the integers?

$$\text{mean} = \frac{\text{sum}}{\text{total}}$$

$$-12 = \text{sum} \div 6$$

$$\text{sum} = -12 \times 6 \checkmark$$

$$= -72 \checkmark$$

The sum of the integers is -72 . \checkmark

5. The average temp is 18°C . The temp. decreases by 2°C every kilometre above sea level. What is the temp. 5km above sea level?

$$(-2^\circ\text{C}) \times 5 = -10^\circ\text{C} \checkmark$$

$$18^\circ\text{C} + (-10^\circ\text{C}) = 8^\circ\text{C} \checkmark$$

The temp 5km above sea level is 8°C . \checkmark

6. The average temp is 20°C in the morning. The temp rises 3°C every hour. How long does it take to reach 32°C ?

$$32^\circ\text{C} - 20^\circ\text{C} = 12^\circ\text{C} \checkmark$$

$$12^\circ\text{C} \div 3^\circ\text{C} = 4\text{h.} \checkmark$$

It takes 4h to reach 32°C . —

11. A clock loses 6 min every hour. At 9:00pm the clock shows the correct time. What time will the clock show the next morning at 11:00am?

9-10, 10-11, 11-12, 12-1, 1-2, 2-3, 3-4, 4-5, 5-6, 6-7, 7-8, 8-9, 9-10, 10-11 ✓

14 hrs. ✓

$$(-6) \times 14 = -84 \text{ min.} \checkmark$$

$$11:00 \text{ am} - 60 \text{ min} = 10:00 \text{ am} - 14 \text{ min} = \boxed{9:56 \text{ am}} \checkmark$$

The clock will show 9:56 am when it is actually 11:00 am. ✓

Assignment Pg. 316 #11-19