

Arithmetic

Term 1 week 1

Date:

No.

1a

$$1:40000$$

$$1\text{cm} : 40000\text{cm}$$

$$1\text{cm} : 400\text{m}$$

$$1\text{cm} : 0.4\text{km}$$

$$2.5\text{cm} : (0.4 \times 2.5)\text{km}$$

$$2.5\text{cm} : 1\text{km}$$

The actual length of road is 1 km.

1b

$$1\text{cm} : 400\text{m}$$

$$1\text{cm}^2 : 160000\text{m}^2$$

The actual area is 160000m²

2a

$$2.24 \div 0.07$$

$$= \frac{2.24}{0.07}$$

$$= \frac{224}{7} \quad (\text{by long division})$$

$$= 32 \quad \#$$

2b

$$\frac{1}{21} \div (-3\frac{1}{3}) \times [\frac{1}{3} - \frac{1}{5} \times (-2\frac{1}{2})]$$

$$= \frac{1}{21} \div (-\frac{10}{3}) \times [\frac{1}{3} - \frac{1}{5} \times (-\frac{5}{2})]$$

$$= \frac{1}{21} \times (-\frac{3}{10}) \times [\frac{1}{3} + \frac{1}{2}]$$

$$= -\frac{81}{31042} \times \frac{5}{12}$$

$$= -\frac{1}{84} \quad \#$$

3a

Time taken to walk

$$= (\frac{3}{6})\text{hr}$$

$$= \frac{1}{2}\text{hr}$$

$$= 30\text{ mins.}$$

3b

$$\text{Running speed} = \frac{0.5}{\frac{360}{60}}$$

$$= 0.5 \times \frac{60}{360}$$

$$= 15\text{ km/h}$$

3c

Total distance travelled

$$= 3 + 0.5$$

$$= 3.5\text{ km}$$

Total time taken = 30 + 2

$$= 32\text{ mins}$$

Ave speed for whole journey

$$= \frac{3.5}{\frac{32}{60}}$$

$$= 3.5 \times \frac{60}{32}$$

$$= \frac{210}{32}$$

$$= 6\frac{9}{16}\text{ km/h}$$

4a

$$\frac{75}{100} \times 12000 = 9000$$

\$9000 was divided among them.

$$\frac{9000}{15} \times 4 = 2400$$

Peter got \$2400.

4b

$$12000 - 9000 = 3000$$

\$3000 was placed on reserve.

4b

$$\frac{6000}{8} \times 3 = 2250$$

Richard got \$2250

4b

$$\frac{6000}{8} \times 4 = 3000$$

Peter got \$3000

5

$$0.35 \times 48 \times 5 = 84$$

$$530.40 - 84 = 446.4$$

$$(446.4 \div 48) \div 31 = 0.30$$

The charge is 5 cents cheaper.