

## Ratio Word Problems

17d. Divide 50cm in the ratio 7:13

total parts: 20

$$\frac{50}{20} = 2.5 \text{ cm} = 1 \text{ part}$$

$$7 \text{ parts} : 7(2.5) = 17.5 \text{ cm}$$

$$13 \text{ parts} : 13(2.5) = 32.5 \text{ cm}$$

19. Lotto winnings \$ 400 000

ratio of 5:3

- total parts : 8

$$- \frac{400\,000}{8} = \$50\,000$$

$$5(50\,000) = \$250\,000$$

$$3(50\,000) = \$150\,000$$

13. water : alcohol

$$15 : 2 = 662 \text{ mL} : x$$

$$\frac{15}{2} \times \frac{662}{x}$$

$$15x = (2)(662)$$

$$\frac{15x}{15} = \frac{1324}{15}$$

$$x = 88.26 \text{ mL}$$

first side

6 - 8

second side

14 - 18, 21, 26