

Chapter 4 Test

1a. $\frac{4}{5}$

1b. $\frac{1}{5}$

2a.. $\frac{27}{36} = \frac{3 \cdot \cancel{9}}{4 \cdot \cancel{9}} = \frac{3}{4}$

2b. $\frac{72n^2}{180n} = \frac{2 \cdot \cancel{36} \cdot \cancel{n} \cdot n}{5 \cdot \cancel{36} \cdot \cancel{n}} = \frac{2n}{5}$

3.
$$-\frac{3x}{4} \left(\frac{1}{5x^2} \right) = -\frac{3 \cdot \cancel{x}}{4} \left(\frac{1}{5 \cdot x \cdot \cancel{x}} \right)$$

$$= -\frac{3}{20x}$$

4. COFFEE DRINKERS

c = morning coffee drinkers

$$c = \frac{2}{5}(100)$$

$$c = \frac{2}{\cancel{5}} \left(\frac{20 \cdot \cancel{5}}{1} \right) = 40$$

40 people of the 100 questioned started their morning with coffee.

5.
$$\frac{4a}{3} \div \frac{a^2}{9} = \frac{4a}{3} \cdot \frac{9}{a^2}$$

$$= \frac{4 \cdot \cancel{a}}{\cancel{3}} \cdot \frac{3 \cdot \cancel{3}}{a \cdot \cancel{a}} = \frac{12}{a}$$

6.
$$\frac{x}{6} - \frac{4}{5} = \frac{x \cdot 5}{6 \cdot 5} - \frac{4 \cdot 6}{5 \cdot 6}$$

$$= \frac{5x}{30} - \frac{24}{30}$$

$$= \frac{5x - 24}{30}$$

7. $\frac{7}{8} = \frac{7 \cdot 3a}{8 \cdot 3a} = \frac{21a}{24a}$

8



