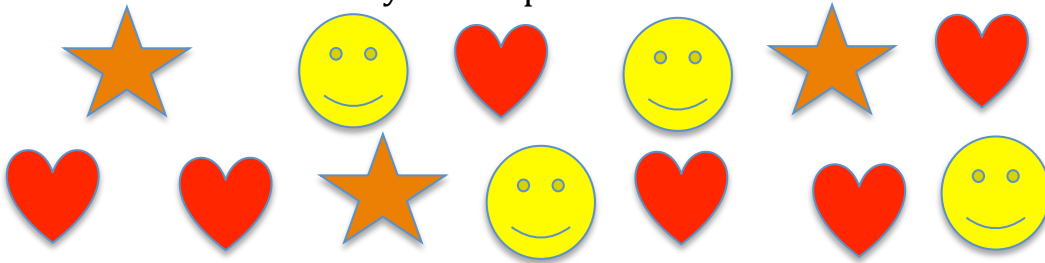


Name _____

Date _____

Review Packet Ratios/Rates/Proportions

1. Write each ratio 3 ways in simplest form.



a) What is the ratio of stars to smiley faces? _____

b) What is the ratio of hearts to stars? _____

c) What is the ratio of smiley faces to hearts? _____

d) What is the ratio of stars to total? _____

2. State whether or not each pair of ratios forms a proportion.

a) $\frac{8}{5} = \frac{32}{12}$

b) $\frac{1 \text{ cat}}{2 \text{ dogs}} = \frac{4 \text{ dogs}}{8 \text{ cats}}$

c) $\frac{3}{16} = \frac{5}{30}$

d) $\frac{4 \text{ cakes}}{12 \text{ pies}} = \frac{6 \text{ cakes}}{18 \text{ pies}}$

e) $\frac{3}{23} = \frac{6}{50}$

f) $\frac{36 \text{ lbs}}{28 \text{ ft}} = \frac{18 \text{ lb}}{14 \text{ ft}}$

3. Solve each Proportion.

a) $\frac{x}{8} = \frac{21}{14}$

b) $\frac{45}{m} = \frac{5}{3}$

c) $\frac{10}{14} = \frac{c}{35}$

d) $\frac{5}{22} = \frac{35}{m}$

e) $\frac{p}{12} = \frac{5}{15}$

f) $\frac{6}{16} = \frac{w}{12}$

g) $\frac{8.4}{y} = \frac{11.2}{6.8}$

h) $\frac{5}{6} = \frac{3}{a}$

i) $\frac{12}{20} = \frac{14}{x}$

4. Find the unit rate.

a) $\frac{9 \text{ slices}}{3 \text{ people}}$

b) $\frac{11 \text{ cups}}{22 \text{ servings}}$

c) $\frac{18 \text{ hours}}{6 \text{ meters}}$

d) $\frac{16 \text{ shapes}}{5 \text{ boxes}}$

5. Write and solve a proportion for each question.

a) If Charlie can type 75 words in 100 seconds, how many words can he type in 5 minutes?

b) Emma collected 72 apples from the orchard and put an equal number of apples into 6 baskets. Mrs. Doolan wants 3 baskets of apples. How many apples will Mrs. Doolan receive?

c) One stone statue on Easter Island is 12 meters high. The nose of the statue is 3.3 meters long. If a proportional statue is only 10 meters high, how long will the nose be?

6. Solve each percent word problem. Round to the nearest tenth if necessary.

a) What is 40% of 75?

b) 22 is 82% of what number?

c) What percent of 72 is 16?

d) What number is 70% of 62?

- e) There are 120 beads in a friendship necklace. 15% of the beads are made of glass. How many beads are made of glass?
- f) Sarah answered 24 questions on her test correctly and earned an 80%. How many questions were on the test?
- g) A runner is participating in the Boston Marathon. He has run 12 miles of the 26 mile course. What percent of the course has he run so far?
- h) 85% of the sixth graders voted to have outdoor recess. If there are 212 sixth graders, how many voted to have outdoor recess?