Grade 8 Ch.3 Fraction Pretest

Name: Ky

1. A) $\frac{3}{11} \times 3$ → $\frac{9}{11}$

B) $2 \times \frac{7}{12}$ → $\frac{14}{12} = \frac{7}{6} = 1\frac{1}{6}$

c) $\frac{7}{8} \times \frac{8}{9}$ → $\frac{56}{72} \div 8 \div 8$ → $\frac{7}{9}$

d) $\frac{4}{5} \times \frac{6}{7}$ → $\frac{24}{35}$

e) $1\frac{2}{3} \times 4\frac{1}{4}$ → $\frac{5}{3} \times \frac{17}{4}$ → $\frac{85}{12} = 7\frac{1}{12}$

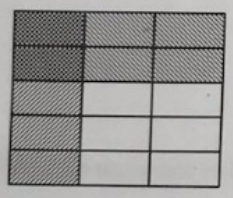
f) $8 \div \frac{4}{7}$ → $8 \times \frac{7}{4}$ → $\frac{56}{4} \div 4 \div 4$ → $= 14$

g) $2\frac{2}{3} \div \frac{2}{5}$ → $\frac{8}{3} \div \frac{2}{5}$ → $\frac{8}{3} \times \frac{5}{2}$ → $\frac{40}{6}$ → $\frac{20}{3} = 6\frac{2}{3}$

h) $2\frac{1}{3} \div 1\frac{4}{5}$ → $\frac{7}{3} \div \frac{9}{5}$ → $\frac{7}{3} \times \frac{5}{9}$ → $\frac{35}{27} = 1\frac{8}{27}$

2. Find $\frac{7}{9}$ of 27. → $\frac{1}{9}$ of 27 = 3 → ×7 → 21

3. What product can be represented by the darkest area in this model?



$\frac{1}{3} \times \frac{2}{5}$

4. Two-fifths of Aika's stamp collection are European stamps. One-half of her European stamps are from France. What fraction of Aika's stamps are from France?

$\frac{2}{5}$ of $\frac{1}{2}$ = France → $\frac{2}{10} = \frac{1}{5}$ France

5. Katlyn had $\frac{3}{8}$ of her allowance left after buying some clothes. She spent $\frac{1}{2}$ of this money on food. What fraction of her total allowance did Katlyn spend on food?

$\frac{1}{2}$ of $\frac{3}{8}$

$\frac{1}{2} \times \frac{3}{8} = \frac{3}{16}$ Spent on food

6. How many servings of $\frac{3}{5}$ cup of juice can you make from 9 cups of juice?

$9 \div \frac{3}{5}$

$9 \times \frac{5}{3} = \frac{45}{3} = 15$

You can serve 15 servings

____ 7. Sally pays \$600 per month for rent. This represents $\frac{2}{3}$ of her monthly salary. What is Sally's monthly salary?

$\frac{2}{3}$ of month = 600) ÷2

÷2 ↓ $\frac{1}{3}$ of month = 300

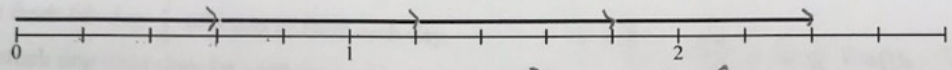
$\frac{3}{3}$ of month = \$900

$600 \div \frac{2}{3}$

$600 \times \frac{3}{2} = \frac{1800}{2} = 900$

is her month salary.

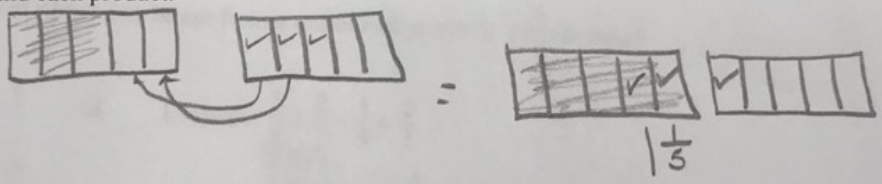
8. Write the multiplication equation represented by this number line.



$4 \times \frac{3}{5} = 2\frac{2}{5}$

9. Draw a picture to find each product.

$2 \times \frac{3}{5}$



$1\frac{1}{5}$

10. Shade the rectangle to find this product. $\frac{2}{5} \times \frac{3}{7}$ = $\frac{6}{35}$

11. Find this product. $\frac{3}{8} \times \frac{20}{21}$

$\frac{60}{168} \div 4 \div 4 = \frac{15}{42}$

12. Simplify first. Then multiply. $\frac{24}{33} \times \frac{77}{84}$

$\frac{1848}{2772} \div \frac{924}{924} = \frac{2}{3}$

$\frac{2}{3} \times \frac{7}{7} = \frac{2}{3} \times \frac{1}{1} = \frac{2}{3}$

13. Replace ☐ with a whole number to make the equation true.

$\frac{\boxed{2}}{3} \times \frac{5}{8} = \frac{5}{12}$

$\frac{2 \times 5}{24} = \frac{5}{12} = \frac{10}{12}$

14. Find this quotient. $\frac{13}{15} \div \frac{2}{3}$

$\frac{13}{15} \times \frac{3}{2} = \frac{39}{30} = 1\frac{9}{30}$

15. Shane feeds his dog $\frac{3}{8}$ of a cup of food each day.
How much dog food does he need for 11 days' supply?

$11 \times \frac{3}{8} = \frac{33}{8} = 4\frac{1}{8}$ cups needed

16. How many $1\frac{1}{8}$ m pieces of ribbon can be cut from a roll of ribbon that is $13\frac{1}{2}$ m long?

17. Evaluate. $\frac{7}{8} + \left(\frac{3}{4} - \frac{1}{8}\right) \times \frac{4}{5}$

$\frac{7}{8} + \left(\frac{6}{8} - \frac{1}{8}\right) \times \frac{4}{5}$

$\frac{7}{8} + \frac{5}{8} \times \frac{4}{5}$

$\frac{7}{8} + \frac{20}{40}$

$\frac{7}{8} + \frac{1}{2}$

$\frac{7}{8} + \frac{4}{8} = \frac{11}{8} = 1\frac{3}{8}$ has $\frac{5}{7}$

18. Evaluate. $\frac{5}{4} \times \frac{2}{3} - \frac{1}{6} \div \frac{2}{3}$

$\frac{10}{12} - \frac{1}{6} \div \frac{2}{3}$

$\frac{10}{12} - \frac{1}{6} \times \frac{3}{2}$

$\frac{10}{12} - \frac{3}{12} = \frac{7}{12}$

19. Jake had 63 marbles. He gave $\frac{2}{7}$ to Mary. He then gave $\frac{1}{3}$ of the rest to Alexa.
What fraction of his marbles did Jake have left? Explain your work.

Jake has $\frac{10}{21}$ left

Mary $\frac{2}{7}$ of 63 = 18 → 63 − 18 left

Alexa = $\frac{1}{3}$ of 45 = 15

63 − 18 − 15 = 30 left

$\frac{30}{63} = \frac{10}{21}$

20) Use a #line to show $3 \div \frac{4}{7} = 5\frac{1}{4}$