NAME _____ **| DATE** _____

📝 Fractions Work Sample page 1 of 2

1 Anthony's teacher gave the class this problem: $\frac{7}{10} + \frac{5}{100}$.

   a Anthony says it's better to think about money rather than a clock face to help solve this problem. Do you agree? Explain your answer.

     Anthony is correct. Explanations will vary.
     Tenths & hundredths are better suited to money since ¹⁄₁₀ of a dollar is 10¢ and ¹⁄₁₀₀ is 1¢. ¹⁄₁₀ of an hour is 6 minutes and ¹⁄₁₀₀ of an hour is a fraction of a minute; both can be hard to work with mentally.

   b Solve $\frac{7}{10} + \frac{5}{100}$. Show your work.

     Work will vary. Example:
     ⁷⁄₁₀ = 7 dimes = 70¢; ⁵⁄₁₀₀ = 5 pennies = 5¢
     70 + 5 = 75¢; 75¢ is ¾ of a dollar
     ⁷⁄₁₀ + ⁵⁄₁₀₀ = ⁷⁵⁄₁₀₀ or ¾

   c Express the answer to $\frac{7}{10} + \frac{5}{100}$ as a fraction: **⁷⁵⁄₁₀₀ or ¾**

2 Sara's teacher gave the class this problem: $\frac{1}{4} - \frac{3}{20}$.

   a Sara says it's better to think about a clock face rather than money to help solve this problem. Do you agree? Explain your answer.

     Sara is incorrect. Explanations will vary.
     Fourths work for both clocks & money, but twentieths are better suited to money since ¹⁄₂₀ of a dollar is a nickel or 5¢. ¼ of a dollar is a quarter or 25¢.

   b Solve $\frac{1}{4} - \frac{3}{20}$. Show your work.

     Work will vary.
     ¼ = 1 quarter or 25¢; ³⁄₂₀ = 3 nickels or 15¢
     25 − 15 = 10¢; 10¢ is ¹⁰⁄₁₀₀ or ¹⁄₁₀ of a dollar
     ¼ − ³⁄₂₀ = ⁵⁄₂₀ (5 nickels) − ³⁄₂₀ (3 nickels) = ²⁄₂₀ or ¹⁄₁₀

   c Express the answer to $\frac{1}{4} - \frac{3}{20}$ as a fraction: **¹⁰⁄₁₀₀ or ²⁄₂₀ or ¹⁄₁₀**

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3 Here is another problem: $\frac{2}{3} + \frac{1}{4}$.

a Is it better to think about a clock face or money to help solve this problem? Explain your answer.

A clock is better suited for this problem. Explanations will vary. Fourths work for both clocks & money, but thirds are more suited to clocks. ⅓ of a clock is 20 minutes; ⅔ is 40 minutes. ¼ of a clock is 15 minutes.

b Solve $\frac{2}{3} + \frac{1}{4}$. Show your work.

Work will vary.

⅔ = 40 min; ¼ = 15 min

40 + 15 = 55 minutes or ⁵⁵⁄₆₀ or ¹¹⁄₁₂ of an hour

⅔ + ¼ = ⁸⁄₁₂ + ³⁄₁₂ = ¹¹⁄₁₂

c Express the answer to $\frac{2}{3} + \frac{1}{4}$ as a fraction: **⁵⁵⁄₆₀ or ¹¹⁄₁₂**

4 Here is one more problem: $2\frac{5}{6} - \frac{3}{4}$.

a Is it better to think about a clock face or money to help solve this problem? Explain your answer.

A clock is better suited for this problem. Explanations will vary. Fourths work for both clocks & money, but sixths are better suited to clocks. ⅙ of a clock is 10 minutes; ⅚ is 50 minutes. ¼ of a clock is 15 minutes; ¾ of a clock is 45 minutes.

b Solve $2\frac{5}{6} - \frac{3}{4}$. Show your work.

Work will vary.

2⅚ = 2 hr 50 min; ¾ = 45 min

2 hr 50 min – 45 min = 2 hr 5 min or 2⁵⁄₆₀ or 2¹⁄₁₂ hour

2⅚ – ¾ = 2⁵⁄₆₀ or 2¹⁄₁₂

c Express the answer to $2\frac{5}{6} - \frac{3}{4}$ as a fraction: **2⁵⁄₆₀ or 2¹⁄₁₂**