Day 4 extension questions

1. Use the digit cards only once to complete these multiplications.

$$9 \quad 2 \quad 4 \quad 6 \quad 3$$

$$\boxed{} \times \frac{\boxed{}}{\boxed{}} = \frac{\boxed{}}{\boxed{}}$$

$$1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6$$

$$\boxed{} \times \frac{\boxed{}}{\boxed{}} = \frac{\boxed{}}{\boxed{}}$$

2.

Whitney has calculated $4 \times \frac{3}{14}$

From the picture I can see that $4 \times \frac{3}{14} = \frac{12}{56}$

Do you agree?

Explain why.

3.

Jack runs $2\frac{2}{3}$ miles three times per week.

Dexter runs $3\frac{3}{4}$ miles twice a week.

Who runs the furthest during the week?

Explain your answer.

4.

Work out the missing numbers.

$$2\frac{\boxed{}}{8} \times \boxed{} = 7\frac{7}{8}$$

Explain how you worked it out.

5.

True or False?

To find $\frac{3}{8}$ of a number, divide by 3 and multiply by 8

Convince me.

6.

Ron gives $\frac{2}{9}$ of a bag of 54 marbles to Alex.

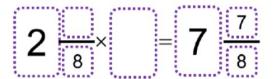Teddy gives $\frac{3}{4}$ of a bag of marbles to Alex.

Ron gives Alex more marbles than Teddy.

How many marbles could Teddy have to begin with?
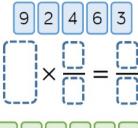
$$\frac{2}{9} \text{ of } 54 > \frac{3}{4} \text{ of } \boxed{}$$

Day 4 extension questions

1.

Use the digit cards only once to complete these multiplications.

9 | 2 | 4 | 6 | 3

$$\Box \times \frac{\Box}{\Box} = \frac{\Box}{\Box}$$

1 | 2 | 3 | 4 | 5 | 6

$$\Box \times \frac{\Box}{\Box} = \frac{\Box}{\Box}$$

$2 \times \frac{3}{4} = \frac{9}{6}$

Possible answers:

$2 \times \frac{1}{3} = \frac{4}{6}$

$2 \times \frac{1}{4} = \frac{3}{6}$

2.

Whitney has calculated $4 \times \frac{3}{14}$

?

From the picture I can see that $4 \times \frac{3}{14} = \frac{12}{56}$

Do you agree?

Explain why.

Possible answer:

I disagree. Whitney has shaded 12 fourteenths. She has counted all of the boxes to give her the denominator when it is not needed. The answer should be $\frac{12}{14}$ or $\frac{6}{7}$

3.

Jack runs $2\frac{2}{3}$ miles three times per week.

Dexter runs $3\frac{3}{4}$ miles twice a week.

Who runs the furthest during the week?

Explain your answer.

Jack runs $2\frac{2}{3} \times 3 = 8$ miles.

Dexter runs $3\frac{3}{4} \times 2 = 7\frac{1}{2}$ miles.

Jack runs further by half a mile.

4.

Work out the missing numbers.

$$2\frac{\Box}{8} \times \Box = 7\frac{7}{8}$$

Explain how you worked it out.

Possible answer:

$2\frac{5}{8} \times 3 = 7\frac{7}{8}$

I knew that the multiplier could not be 4 because that would give an answer of at least 8. So the multiplier had to be 3. That meant that the missing numerator had to give a product of 15. I knew that 5 multiplied by 3 would give 15

5.

True or False?

To find $\frac{3}{8}$ of a number, divide by 3 and multiply by 8

Convince me.

False. Divide the whole by 8 to find one eighth and then multiply by three to find three eighths of a number.

6.

Ron gives $\frac{2}{9}$ of a bag of 54 marbles to Alex.

Teddy gives $\frac{3}{4}$ of a bag of marbles to Alex.

Ron gives Alex more marbles than Teddy.

How many marbles could Teddy have to begin with?

$$\frac{2}{9} \text{ of } 54 > \frac{3}{4} \text{ of } \Box$$

Teddy could have 16, 12, 8 or 4 marbles to begin with.