

Fractions and Decimals Check-In

Time: 20 min. 6 questions.

Instructions

Answer each question on your own. Show your work for the numeric question so your teacher can see how you found your answer. If you are unsure about a word, use what you know about place value and fractions to make your best attempt.

Questions

1. In the number 4.57, what is the value of the digit 7?

- A) seven ones
- B) seven tenths
- C) seven hundredths
- D) seven thousandths

([Skills](#))

2. Express the fraction $\frac{3}{10}$ as a decimal number. ([Skills](#))

3. True or false: Adding a zero to the right of the last digit in a decimal number changes its value. ([Knowledge](#))

4. Calculate the sum: $12.45 + 8.30$. Write your answer as a decimal number. ([Skills](#))

5. Which fraction is equivalent to $\frac{6}{8}$ when written in simplest form?

- A) $\frac{3}{4}$
- B) $\frac{2}{3}$
- C) $\frac{4}{6}$
- D) $\frac{1}{2}$

([Skills](#))

6. Explain why 0.5 and $\frac{1}{2}$ represent the same number. Use the idea of the number line in your answer. ([Understanding](#))

Curriculum coverage

Question	Outcome alias
1	Skills
2	Skills
3	Knowledge
4	Skills
5	Skills
6	Understanding

Answer key

1. C) seven hundredths. In 4.57, the digit 7 sits two places right of the decimal point, so it represents 7 hundredths ([Skills](#)).
2. 0.3. The fraction $\frac{3}{10}$ has a denominator of 10, so it becomes 3 tenths, written as 0.3 ([Skills](#)).
3. False. A zero placed to the right of the last digit in a decimal number does not change its value, since it does not change the value of any other digit ([Knowledge](#)).
4. 20.75. Adding 12.45 and 8.30 using the standard algorithm, lining up the decimal points, gives 20.75 ([Skills](#)).
5. A) $\frac{3}{4}$. Dividing both the numerator and denominator of $\frac{6}{8}$ by their common factor 2 gives $\frac{3}{4}$, which cannot be simplified further ([Skills](#)).
6. 0.5 and $\frac{1}{2}$ are the same point on the number line because $\frac{1}{2}$ is the fraction with denominator 10 written as $\frac{5}{10}$, which equals 0.5 in decimal notation, so both names label the same location halfway between 0 and 1 ([Understanding](#)).