Decimals

Interview Screens

These are the questions as they appear on the computer screen. It’s helpful preparation to review the questions, prompts, and explanations before interviewing students.

Decimals Interview Question 1 of 11
Decimals Interview Question 2 of 11

1. Question 2
   Look at these numbers. Which is smallest?
   
   0.32  2.1  0.185

2. Answer
   - Correct (0.185)
   - Incorrect
   - Self-corrected (0.185)
   - Did Not Answer

3. Explanation
   How did you decide?
   - Added zeros and then compared
   - Changed to fractions and then compared
   - Evaluated place value from greatest to least
   - Converted to percents
   - Gave other reasonable explanation
   - Guessed, did not explain, or gave faulty explanation

Decimals Interview Question 3 of 11

1. Question 3
   Look at these numbers. Which is greatest?
   
   1/5  0.503  0.7

2. Answer
   - Correct (4/5)
   - Incorrect
   - Self-corrected (4/5)
   - Did Not Answer

3. Explanation
   How did you decide?
   - Changed to all fractions, decimals, or percents and then compared
   - Compared to 1/2 or 1
   - Gave other reasonable explanation
   - Guessed, did not explain, or gave faulty explanation
Decimals Interview Question 4 of 11

Decimals Interview Question 5 of 11
Decimals Interview Question 6 of 11

**Question 6**

For this multiplication problem, don’t figure out the exact answer. Decide which of these choices is the best estimate: 10, 15, 20, or 25?

3.9 x 4.85
10 15 20 25

**Explanation**

How did you decide?

- Used standard algorithm to multiply
- Rounded and then multiplied
- Gave other reasonable explanation
- Guessed, did not explain, or gave faulty explanation

Decimals Interview Question 7 of 11

**Question 7**

Solve this problem.

12.6 x 10

**Explanation**

How did you figure out the answer?

- Used standard algorithm to multiply
- Used rule of adjusting the decimal point to multiply by 10
- Multiplied 12 x 10 and 0.6 x 10
- Gave other reasonable explanation
- Guessed, did not explain, or gave faulty explanation
Decimals Interview Question 8 of 11

1. Question 8
   Solve this problem.
   \[163.4 \div 10\]

2. Answer
   - Correct (16.34)
   - Incorrect
   - Self-corrected (16.34)
   - Did Not Answer

3. Explanation
   How did you figure out the answer?
   - Used standard algorithm to divide
   - Used rule of adjusting the decimal point to divide by 10
   - Used multiplication (e.g., \(10 \times 16.34 = 163.4\))
   - Gave other reasonable explanation
   - Guessed, did not explain, or gave faulty explanation

Decimals Interview Question 9 of 11

1. Question 9
   For this division problem, look at the choices and decide which is the exact answer.
   \[\frac{12}{0.3} = \frac{4}{0.4} = 40\]

2. Answer
   - Correct (40)
   - Incorrect
   - Self-corrected (40)
   - Did Not Answer

3. Explanation
   How did you figure out the answer?
   - Divided 12 by 3 and then adjusted decimal point
   - Multiplied and then adjusted decimal point
   - Analyzed choices and chose one that seemed most reasonable
   - Moved decimal point one place to the right in both numbers and divided
   - Gave other reasonable explanation
   - Guessed, did not explain, or gave faulty explanation

Notes
   Record student response
Decimals Interview Question 10 of 11

1. Question 10
   This pen costs $1.39. How much do 10 of these pens cost?

2. Answer
   - Correct ($13.90)
   - Incorrect
   - Self-corrected ($13.90)
   - Did Not Answer

3. Explanation
   How did you figure out the answer?
   - Used standard algorithm to multiply
   - Adjusted decimal point
   - Broke apart $1.39 and then multiplied
   - Multiplied $1.40 \times 10$ and then subtracted
   - Gave other reasonable explanation
   - Guessed, did not explain, or gave faulty explanation

Decimals Interview Question 11 of 11

1. Question 11
   Molly ran 1.5 miles each day for 20 days. How many miles did she run altogether?

2. Answer
   - Correct (30)
   - Incorrect
   - Self-corrected (30)
   - Did Not Answer

3. Explanation
   How did you figure out the answer?
   - Used standard algorithm to multiply
   - Multiplied 20 \times 1 and then 20 \times 0.5
   - Multiplied 1.5 \times 2 and then 3 \times 10
   - Multiplied 1.5 \times 10 and then 15 \times 2
   - Multiplied 15 \times 2 and then adjusted the decimal point
   - Gave other reasonable explanation
   - Guessed, did not explain, or gave faulty explanation