

Interpret multiplication by a fraction as scaling

NAME	DATE	SCORE / 10
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1 Without multiplying, is $\frac{13}{9} \times 553$ greater than, less than, or equal to 553?

- ☐ Greater than 553
 ☐ Less than 553
 ☐ Equal to 553

2 Without working them out, which of these products are greater than 8?

Tick every answer that is true.

- ☐ **A** $8 \times \frac{1}{4}$
☐ **B** $8 \times \frac{10}{9}$
☐ **C** $8 \times \frac{11}{7}$
☐ **D** $8 \times \frac{17}{9}$
☐ **E** $8 \times \frac{8}{8}$

3 Without multiplying, is $\frac{5}{6} \times 890$ greater than, less than, or equal to 890?

- ☐ Greater than 890
 ☐ Less than 890
 ☐ Equal to 890

4 Without working them out, which of these products are less than 6?

Tick every answer that is true.

- ☐ **A** $6 \times \frac{2}{3}$
☐ **B** $6 \times \frac{1}{2}$
☐ **C** $6 \times \frac{8}{7}$
☐ **D** $6 \times \frac{11}{6}$

5 Without multiplying, which product is less than 46?

☐ $\frac{13}{8} \times 46$
 ☐ $\frac{1}{2} \times 46$
 ☐ $\frac{21}{11} \times 46$
 ☐ $\frac{3}{3} \times 46$

6 Without working them out, which of these products are greater than 24?

Tick every answer that is true.

- ☐ **A** $24 \times \frac{7}{7}$
☐ **B** $24 \times \frac{6}{6}$
☐ **C** $24 \times \frac{12}{6}$
☐ **D** $24 \times \frac{4}{3}$
☐ **E** $24 \times \frac{8}{4}$

7 Without multiplying, which product is greater than $\frac{2}{9}$?

☐ $\frac{13}{12} \times \frac{2}{9}$
 ☐ $\frac{3}{5} \times \frac{2}{9}$
 ☐ $\frac{5}{5} \times \frac{2}{9}$
 ☐ $\frac{3}{4} \times \frac{2}{9}$

8 Without working them out, which of these products are less than 13?

Tick every answer that is true.

- ☐ **A** $13 \times \frac{2}{3}$
☐ **B** $13 \times \frac{2}{4}$
☐ **C** $13 \times \frac{5}{4}$
☐ **D** $13 \times \frac{1}{2}$
☐ **E** $13 \times \frac{9}{9}$

9

Without multiplying, is $\frac{1}{2} \times \frac{17}{12}$ greater than, less than, or equal to $\frac{1}{2}$?

☐ Greater than $\frac{1}{2}$
 ☐ Less than $\frac{1}{2}$
 ☐ Equal to $\frac{1}{2}$

10

Without working them out, which of these products are greater than 22?

Tick every answer that is true.

☐ **A** $22 \times \frac{1}{8}$

☐ **B** $22 \times \frac{14}{7}$

☐ **C** $22 \times \frac{7}{9}$

☐ **D** $22 \times \frac{12}{8}$

Interpret multiplication by a fraction as scaling

1 Greater than 553

3 Less than 890

5 $\frac{1}{2} \times 46$

7 $\frac{13}{12} \times \frac{2}{9}$

9 Greater than $\frac{1}{2}$

2 B, C, D

Tick exactly these: B: $8 \times \frac{10}{9}$; C: $8 \times \frac{11}{7}$; D: $8 \times \frac{17}{9}$. One missed or one extra is wrong.

4 A, B

Tick exactly these: A: $6 \times \frac{2}{3}$; B: $6 \times \frac{1}{2}$. One missed or one extra is wrong.

6 C, D, E

Tick exactly these: C: $24 \times \frac{12}{6}$; D: $24 \times \frac{4}{3}$; E: $24 \times \frac{8}{4}$. One missed or one extra is wrong.

8 A, B, D

Tick exactly these: A: $13 \times \frac{2}{3}$; B: $13 \times \frac{2}{4}$; D: $13 \times \frac{1}{2}$. One missed or one extra is wrong.

10 B, D

Tick exactly these: B: $22 \times \frac{14}{7}$; D: $22 \times \frac{12}{8}$. One missed or one extra is wrong.