Worksheet: Reciprocals

Question Video

Q1: What is the reciprocal of 13?

A 0

B $\frac{1}{13}$

C $1\frac{1}{13}$

D 13

Q2: What is the reciprocal of $\frac{23}{22}$?

A $\frac{22}{23}$

B $\frac{23}{22}$

C $\frac{1}{22}$

D $\frac{1}{23}$

Q3: What is the reciprocal of 1.25? Give your answer as a fraction in its simplest form.

Question Video

A $\frac{4}{5}$

B $\frac{1}{4}$

C 4

D $\frac{5}{4}$

Q4: What is the reciprocal of $\frac{15}{14}$? Give your answer in its simplest form.

Question Video

A $\frac{14}{15}$

B $\frac{1}{14}$

C $\frac{15}{14}$

D $\frac{1}{15}$

Q5: What is the reciprocal of $1\frac{1}{11}$? Give your answer in its simplest form.

A $\frac{1}{11}$

B 11

C $\frac{11}{12}$

D $\frac{12}{11}$

E 12

Q6: What is the reciprocal of $6\frac{1}{2}$?

Question Video

A $\frac{2}{13}$

B 2

C $\frac{1}{2}$

D $\frac{13}{2}$

E $2\frac{1}{6}$

Q7: What is the reciprocal of $\left(6 - \frac{1}{2}\right)$? Give your answer in its simplest form.

A $\frac{1}{2}$

B 2

C $6\frac{1}{2}$

D $\frac{11}{2}$

E $\frac{2}{11}$

Q8: What is the reciprocal of $\left(8 - \frac{2}{7}\right)$? Give your answer in its simplest form.

A $\frac{2}{7}$

B $\frac{7}{2}$

C $8\frac{2}{7}$

D $\frac{54}{7}$

E $\frac{7}{54}$

Q9: What is the reciprocal of $\left(\frac{3}{4} \div \frac{5}{9}\right)$? Give your answer in its simplest form.

Question Video

A $\frac{4}{3}$

B $\frac{20}{27}$

C $\frac{3}{4}$

D $\frac{27}{20}$

Q10: What is the reciprocal of $\left(\frac{11}{8} \div \frac{3}{10}\right)$? Give your answer in its simplest form.

Question Video

A $\frac{8}{11}$

B $\frac{12}{55}$

C $\frac{11}{8}$

D $\frac{55}{12}$

Q11: Find the multiplicative inverse of $\left(\frac{8}{3}+\frac{9}{2}\right)$.

A $-\frac{43}{6}$

B $\frac{6}{43}$

C $-\frac{6}{43}$

D $\frac{43}{6}$

Q12: $\_\_ \times 2\frac{1}{5} = 1$.

A $\frac{5}{11}$

B $2\frac{5}{11}$

C $1\frac{1}{5}$

D $2\frac{1}{2}$

E $2\frac{1}{5}$

Q13: What is the multiplicative inverse of $\sqrt{7}+\sqrt{6}$?

A $\frac{1}{\sqrt{6}}-\frac{1}{\sqrt{7}}$

B $\sqrt{7}-\sqrt{6}$

C $\frac{1}{\sqrt{7}}+\frac{1}{\sqrt{6}}$

D $-\sqrt{7}-\sqrt{6}$

E $\frac{1}{\sqrt{7}}-\frac{1}{\sqrt{6}}$

Q14: Given that $\frac{1}{x}=\sqrt{26}-5$, find the value of x and express it in its simplest form.

A $\sqrt{130}$

B $\frac{1}{\sqrt{26}-5}$

C $\sqrt{26}+5$

D $5\sqrt{26}$

Q15: Find the multiplicative inverse of $-4\frac{1}{4}$.

A -4

B $-\frac{1}{2}$

C $-\frac{4}{17}$

D $-\frac{1}{4}$

Q16: Find the value of x for which the rational number $\frac{x-18}{26}$ does not have a multiplicative inverse.

A 26

B 0

C -18

D 18

E -26

Q17: What is the multiplicative inverse of x^6?

A x^5

B x^{-6}

C $(-x)^6$

D $\frac{1}{x}$