5-4 Practice

Dividing Rational Numbers

Find each quotient. Write in simplest form.

1. $\dfrac{1}{2} \div \dfrac{1}{10}$

2. $-\dfrac{3}{8} \div \dfrac{9}{24}$

3. $-\dfrac{15}{16} \div \dfrac{7}{12}$

4. $\dfrac{17}{20} \div \left(-\dfrac{3}{10}\right)$

5. $-\dfrac{3}{8} \div \left(-\dfrac{3}{9}\right)$

6. $\dfrac{25}{32} \div \dfrac{15}{56}$

7. $0 \div \dfrac{17}{18}$

8. $-1\dfrac{1}{2} \div \dfrac{1}{4}$

9. $\dfrac{8}{9} \div \dfrac{22}{81}$

10. $8\dfrac{4}{9} \div 2\dfrac{1}{9}$

11. $4\dfrac{3}{5} \div \dfrac{2}{5}$

12. $-\dfrac{100}{63} \div \dfrac{10}{81}$

13. $18\dfrac{1}{3} \div \left(-4\dfrac{1}{6}\right)$

14. $-3\dfrac{2}{9} \div \dfrac{4}{27}$

15. $-2\dfrac{5}{6} \div \dfrac{3}{51}$

16. $4\dfrac{11}{12} \div 4\dfrac{5}{6}$

17. $\dfrac{2x}{3} \div \dfrac{1}{9}$

18. $\dfrac{a}{4} \div \dfrac{a}{8}$

19. $\dfrac{4k}{5} \div \dfrac{25}{2k}$

20. $\dfrac{ab}{8} \div \dfrac{b}{a}$

21. $\dfrac{2c}{b} \div \dfrac{4a}{b}$

22. $\dfrac{y}{x} \div y^2$

23. $\dfrac{3st}{r} \div \dfrac{4t}{r}$

24. $\dfrac{a^2}{b^2} \div \dfrac{c^2}{b^2}$

25. $-\dfrac{2x}{y} \div \dfrac{4}{y}$

26. $\dfrac{m^2}{2np} \div \dfrac{n}{4p}$

27. Evaluate $x \div y$ if $x = 3\dfrac{1}{2}$ and $y = \dfrac{3}{4}$.

28. Evaluate $w \div z$ if $w = \dfrac{6}{7}$ and $z = 3$.

29. **TRAVEL** What is the average speed that Robin must drive to reach her friend's house 170 miles away in $2\dfrac{1}{2}$ hours?

30. **SEWING** How many choir robes can be made from $20\dfrac{1}{4}$ yards of fabric if each robe needs $1\dfrac{1}{8}$ yards?