

1.3 EXERCISES

HOMEWORK KEY

 = **WORKED-OUT SOLUTIONS**
on p. 000 for Exs. 9, 21, and 33

 = **TAKS PRACTICE AND REASONING**
Exs. 13, 14, 34, 37, 38, and 39

SKILL PRACTICE

1. **VOCABULARY** Copy and complete: A(n) ? is a fraction that compares two quantities measured in different units.

2. **WRITING** Explain how to write $\frac{20 \text{ miles}}{4 \text{ hours}}$ as a unit rate.

TRANSLATING PHRASES Translate the verbal phrase into an expression.

3. 8 more than a number x

4. The product of 6 and a number y

5. $\frac{1}{2}$ of a number m

6. 50 divided by a number h

7. The difference of 7 and a number n


8. The sum of 15 and a number x

9. The quotient of twice a number t and 12

10. 3 less than the square of a number p

11. 7 less than twice a number k

12. 5 more than 3 times a number w


13.  **TAKS REASONING** Which expression represents the phrase “the product of 15 and the quantity 12 more than a number x ”?

(A) $15 + 12 \times x$

(B) $(15 + 12)x$

(C) $15(x + 12)$

(D) $15 \times 12 + x$

14.  **TAKS REASONING** Which expression represents the phrase “twice the quotient of 50 and the sum of a number y and 8”?

(A) $\frac{2 \cdot 50}{y} + 8$

(B) $2\left(\frac{50 + y}{8}\right)$

(C) $2\left(\frac{50}{y + 8}\right)$

(D) $\frac{2}{50} + (y + 8)$

WRITING EXPRESSIONS Write an expression for the situation.

15. Number of tokens needed for v video games if each game takes 4 tokens

16. Number of pages of a 5 page article left to read if you’ve read p pages

17. Each person’s share if p people share 16 slices of pizza equally

18. Amount you spend if you buy a shirt for \$20 and jeans for j dollars

19. Number of days left in the week if d days have passed so far

20. Number of hours in m minutes

21. Number of months in y years

UNIT RATES Find the unit rate.


22. $\frac{32 \text{ students}}{4 \text{ groups}}$


23. $\frac{4.5 \text{ pints}}{3 \text{ servings}}$

24. $\frac{12 \text{ runs}}{5 \text{ innings}}$

25. $\frac{\$136}{20 \text{ shares}}$

ERROR ANALYSIS Describe and correct the error in the units.

26. $\frac{\$2}{\text{foot}} \cdot 24 \text{ feet} = \frac{\$48}{\text{ft}^2}$ 

27. $9 \text{ yards} \cdot \frac{3 \text{ feet}}{1 \text{ yard}} \cdot \frac{\$2}{\text{foot}} = \frac{\$54}{\text{ft}}$ 

EXAMPLE 1

on p. 15
for Exs. 3–14

EXAMPLES 2 and 3

on p. 16
for Exs. 15–21

EXAMPLE 4

on p. 17
for Exs. 18–23