**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_Period:\_\_\_\_\_\_\_\_\_**

**Solving Inequalities by Multiplication and Division Worksheet 352**

**Match each inequality with its corresponding statement.**

**1.** –4*n* ≥ 5 **a.** Negative four times a number is less than five

**2.** $\frac{4}{5}$*n* > 5 **b.** Four fifths of a number is no more than five

**3.** 4*n* ≤ 5 **c.** Four times a number is fewer than five

**4.** $\frac{4}{5}$*n* ≤ 5 **d.** Negative four times a number is no less than five

**5.** 4*n* < 5 **e.** Four times a number is at most five

**6.** –4*n* < 5 **f.** Four fifths a number is more than five

**Solve each inequality. Then check your solution.**

**7.** – $\frac{a}{5}$ < –14 **8.** –13*h* ≤ 52 **9.**  $\frac{s}{16}$ ≥ –6 **10.** 39 > 13*p*

**11.**  $\frac{2}{3}$*n* > –12 **12.** – $\frac{5}{9}$*t* < 25 **13.** – $\frac{3}{5}$*m* ≤ –6 **14.**  $\frac{10}{3}$*k* ≥ –10

**15.**  –3*b* ≤ 0.75 **16.** –0.9*c* > –9 **17.** 0.1*x* $\geq $ –4 **18.** –2.3 < $\frac{j}{4}$

**19.** –15*y* < 3 **20.** 2.6*v* $\geq $ –20.8 **21.** 0 > –0.5*u* **22.** $ \frac{7}{8}$*f* ≤ –1

**Define a variable, write an inequality, and solve each problem. Then check your solution.**

**23.** Negative three times a number is at least 57.

**24.** Two thirds of a number is no more than –10.

**25.** Negative three fifths of a number is less than –6.

**26.** **FLOODING** A river is rising at a rate of 3 inches per hour. If the river rises more than 2 feet, it will exceed flood stages. How long can the river rise at this rate without exceeding flood stage?

**27.** **SALES** Pet Supplies makes a profit of $5.50 per bag on its line of natural dog food. If the store wants to make a profit of no less than $5225, how many bags of dog food does it need to sell?