HOUSTON TEXANS STATS CHALLENGE
PRESENTED BY Schlumberger

SOLVING ONE-STEP EQUATIONS & ONE-STEP INEQUALITIES

EXTENDED LEARNING

1. Texans wide receiver Keke Coutee is 71 inches tall. His teammate J.J. Watt's height in inches, *h*, can be determined by solving the equation $h-6=71$. What does the equation tell us about these two players' heights in relationship to each other? What is J.J. Watt's height?

2. In 2019, Texans running back Duke Johnson rushed the ball for 83 plays and gained an average of 4.9 yards on each play. The equation below represents the relationship between t, the total number of yards rushed by Mr. Johnson, and his average gain for each play. How many yards rounded to the next whole number did Mr. Johnson rush over the 83 plays?

$$\frac{t}{83} = 4.9$$

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3. The Houston Texans Cheerleaders rehearse their routines each week. The number of hours they practice each week can be determined by solving the inequality $60r \geq 540$. What is the minimum number of hours the Cheerleaders rehearse each week?

4. A sack in football occurs when a defensive player tackles the quarterback for a loss of yards on a play. Hall of Fame defensive end Bruce Smith holds the current record for the most career sacks with 200. The inequality below represents the minimum number of sacks, s, J.J. Watt must make to break Bruce Smith's record. How many sacks must J.J. Watt make to break the current record for most career sacks?

$$96 + s > 200$$

ENRICHMENT

Use a Stats Report to write a problem and a one-step equation or one-step inequality comparing the performance of the Texans to the performance of the opposing team. Trade problems with another student in the class and solve the problem.