TAKS Practice (continued)

(8.2)(A) **Number, operation, and quantitative reasoning** The student selects and uses appropriate operations to solve problems and justify solutions. The student is expected to select appropriate operations to solve problems involving rational numbers and justify the selections.

1 Paul bought a pair of pants at 25% off the regular price of $45. What was the sale price of the pants?
   A $30.50
   B $33.75
   C $35.00
   D $40.25

2 Cora bought 3 oranges priced at $0.29 each and 2 loaves of bread priced at $1.09 each. There was no sales tax on these items. She gave the cashier $4.00. How much change did she receive?
   F $3.05
   G $1.85
   H $0.95
   J $0.15

3 Julia is twice as old as her sister Megan. If 4 is subtracted from Julia's age and 4 is added to Megan's age, the numbers will equal. What are the actual ages of Julia and Megan?
   A 16 and 8
   B 14 and 7
   C 18 and 9
   D 6 and 3

4 If $5^{-1} = \frac{1}{5}$ and $5^{-2} = \frac{1}{25}$, what is the value of 5^{-4}?
   F $\frac{1}{625}$
   G $\frac{1}{125}$
   H $\frac{1}{75}$
   J 625

5 Jose had an average score on 75.5 on his first three math tests. He earned an 85 on his fourth test. Which equation can be used to find x, Jose's average math test score for the four tests?
   A $x = \dfrac{75.5 + 85}{4}$
   B $x = \dfrac{(75.5 \div 3) + 85}{4}$
   C $x = \dfrac{(75.5 \times 3) + 85}{4}$
   D $x = \dfrac{75.5}{4} \times 3$

(8.2)(B) **Number, operation, and quantitative reasoning** The student selects and uses appropriate operations to solve problems and justify solutions. The student is expected to use appropriate operations to solve problems involving rational numbers in problem situations.

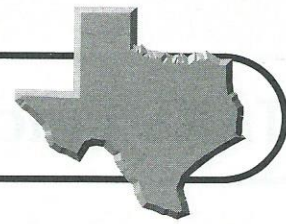**1** What is the value of $\dfrac{n^2}{5} + n^2 - 12$ if $n = 5$?
   A -6 **C** 16
   B -2 **D** 18

2 When 11 is added to the product of 6 and another number, the result is 53. What is the other number?
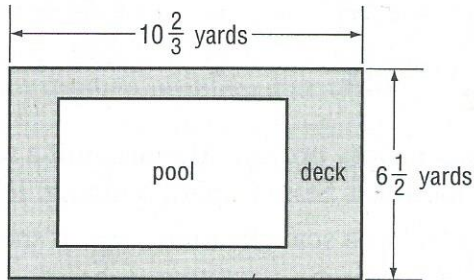   **F** -13 **H** 10.6
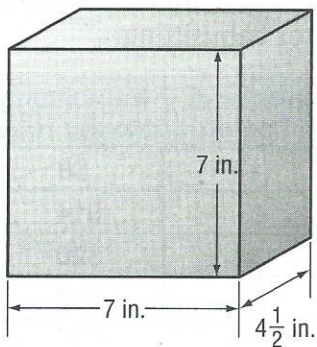   **G** 7   **J** 12

TAKS Practice (continued)

3 The diagram below shows the pool and deck area in Tyler's backyard. The dimensions of the deck are shown on the diagram.

What is the perimeter of the deck in Tyler's backyard?

A $32\frac{1}{6}$ yards

B $34\frac{1}{6}$ yards

C $34\frac{1}{3}$ yards

D $69\frac{1}{3}$ yards

4 Georgia has a plastic container that is a rectangular prism. Its dimensions are shown on the diagram below.

She will fill the container half way with water. How many cubic inches of water will she put into the container?

F $220\frac{1}{2}$ in³   **H** $50\frac{1}{8}$ in³

G $110\frac{1}{4}$ in³   **J** $9\frac{1}{4}$ in³

(8.2)(C) **Number, operation, and quantitative reasoning** The student selects and uses appropriate operations to solve problems and justify solutions. The student is expected to evaluate a solution for reasonableness.

1 Ellen and Terri are shopping at the grocery store and buy the items on their shopping list shown in the table.

Item	Cost
bananas	$1.49
milk	$2.29
bread	$1.29
soda	$3.49
apples	$1.40
rice	$1.39

Ellen used her shopper savings card and they received a 5% discount from the total cost. If Ellen and Terri each pay half of the grocery bill, what is a reasonable amount for each one to pay?

A $3.98

B $4.82

C $5.05

D $5.40

2 Jamal's parents bought a new clothes washer for $799 and a new clothes dryer for $499, including tax. Jamal's parents plan to pay for the total amount of the washer and dryer in 12 monthly payments. What is a reasonable amount for each payment?

F $142

G $122

H $108

J $89