

Announcements 11/16

- DSC Course Evaluations are now open
- Spring 2022 Registration Form
- Speaker Series - Live Stream & In-person
(Starts at 9:00am)

A/B (#7)

What number goes into the box to make the equation true?

$$45 - \square = 2 \times 5$$

$$\Rightarrow 45 - X = 2 \times 5 \quad \text{"Solve for X"} \quad \rightarrow X = \underline{\quad}$$

• Value of LHS must equal value of RHS

• Simplify the RHS
↳ "Do the math!"

$$45 - \boxed{35} = 10 \quad \text{*Algebra}$$

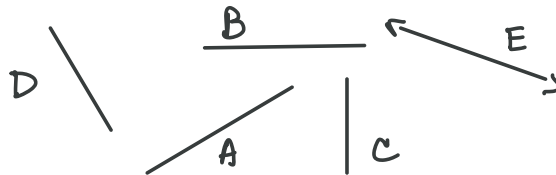
* Algebraic Equations: $45 - X = 2 \cdot 5 \Rightarrow 45 - X = 10$

$$\begin{array}{rcl} 45 - X & = & 10 \\ +X & & +X \\ \hline 45 & = & 10 + X \\ 45 - 10 & = & X \\ 35 & = & X \end{array}$$

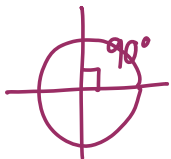
* Balance the eqn.

A/B (#15)

Which line is perpendicular to line A?



Lines D and A create a 90° angle at their intersection



- Locate line A - compare all lines to line A
- Perpendicular - 2 lines that intersect and create a 90° angle.
* Lines extend infinitely in both directions
- Disregard the lines that are obviously not perpendicular to line A
- Visualize extending the lines to see which would create a 90° angle w/ line A (draw the lines)

C/D #1

The formula below is used in sports to find the *winning average*.

$$\text{WINNING AVERAGE} = \frac{\text{WINS}}{\text{GAMES PLAYED}} \quad * \text{fraction, division}$$

Winning averages are always rounded to the nearest thousandths. **place value*

The Hawks had 26 wins and 7 losses during the 2017-2018 season. What was their winning average?

☐ 0.269

☐ 0.788

☐ 0.787

☐ 0.270

$$\begin{aligned} * \text{games played: } & \text{wins} + \text{losses} \\ & 26 + 7 = 33 \end{aligned}$$

$$* \text{games won: } 26$$

$$\text{Winning Average} = \frac{\text{Wins}}{\text{Total games}} = \frac{26}{33} = 0.78787...$$

Round 0.78787... to the nearest thousandths

- Need to use the 4th decimal place to round

$$0.787\boxed{8} \quad \text{Round up!}$$

$$0.788$$

C/D (#4)

View Passage 1

Brand	Price	Weight
Koko's	\$6.00	20 oz
Health Time	\$4.95	16 oz
Leo's	\$5.25	18.5 oz
Geko's	\$4.50	15 oz

Use the table to answer the question.

Healthy and Happy grocery store sells 4 brands of vegan sandwiches. Which brand has the lowest unit price?

- ☐ Koko's
- ☐ Health Time
- ☐ Geko's
- ☒ Leo's

*lowest unit price [unit → per 1 unit]

- Divide each brand's price by their weight

$$\$6 / 20 \text{ oz} = \$0.30$$

$$\$4.95 / 16 = 0.3093$$

$$\$5.25 / 18.5 = 0.283$$

$$\$4.50 / 15 = 0.30$$

Unit Price is the
cost per 1 ounce

→ "30 cents for
1 ounce of
koko's"

C/D #9

View Passage 1

Holiday Sale Discounts	
Sweaters	20% off retail price
Jeans	10% off retail price
Polo shirts	15% off retail price
Jackets	25% off retail price

Use the table to answer the question.

Ramiro is shopping at a clothing store where there's a holiday sale. He wants to buy a sweater with a retail price of \$54.00 and a polo shirt with a retail price of \$27.00.

What is the total cost of the sweater and polo shirt after the discount?

- ☒ \$66.15
- ☐ \$36.00
- ☐ \$54.85
- ☐ \$60.75

- Sweater \$54 , 20% off
- Shirt \$27 , 15% off

• Convert % to decimals: $20\% = \frac{20.0}{100} = 0.20$

$$15\% = \frac{15}{100} = 0.15$$

- "20% of the retail price"

$$0.20 \times 54 = 10.8 \Rightarrow \$10.80 \text{ off } \$54$$

$$54 - 10.8 = 43.2$$

~~X~~ \$43.20 for the sweater

- "15% of the retail price"

$$0.15 \times 27 = 4.05 \Rightarrow \$4.05 \text{ off of } \$27$$

$$27 - 4.05 = 22.95$$

~~X~~ \$22.95 for the shirt

- Add up the discounted prices: $\$22.95 + \$43.20 = \$66.15$