



The Math Dawg

Grade 7

Operations with Percentages_Part 1



NO CALL

A USED CAR LOT IS HAVING A 40% OFF SALE.

1. LET x BE THE PRE-SALE PRICE OF A CAR. USING x WRITE AN EXPRESSION THAT GIVES THE SALE PRICE OF THE CAR
2. THE SALE PRICE OF A CAR ON THE LOT IS \$2700. WRITE AND SOLVE AN EQUATION USING THAT FINDS THE PRE-SALE PRICE OF THE CAR.

SUPPOSE A CIRCLE HAS A CIRCUMFERENCE OF 32π CM.



NO CALC

A. FIND THE AREA OF THE CIRCLE IN TERMS OF π .

CALC ALLOWED

B. WHAT WOULD BE THE RADIUS OF A CIRCLE THAT HAS AN AREA 40% GREATER THAN THE CIRCLE IN PART A? ROUND YOUR ANSWER TO THE NEAREST TENTH.

NO CALC

STEVE WANTS TO BUY 4 CUSTOM TIRES FOR HIS ATV. THE TIRES NORMALLY COST \$250 EACH. HOWEVER, THE ATV DEALER HAS AN OFFER



BUY 3 TIRES, GET THE 4th ONE AT 80% OFF.

STEVE TAKES THE DEAL. THE STATE SALES TAX IS 6%. HOW MUCH DOES STEVE SAVE OVER PAYING FULL PRICE?

!

NO CALC.
TIM, JACK, JOE, AND TYRONE ALL
AGREE TO PITCH IN TO RENT A
VACATION HOME.



- TIM WILL PAY 45% OF THE COST
 - JACK WILL PAY $\frac{1}{8}$ THE THE COST.
 - TYRONE WILL PAY 0.2 OF THE COST
1. WHAT IS JOE'S SHARE AS A PERCENTAGE?

2. IF THE COST IS \$1200 PER MONTH HOW MUCH DOES

TIM PAY?

JACK PAY?

JOE PAY?

TYRONE PAY?

NO CALC.

BELOW IS A BREAKDOWN BY MAJOR OF
STUDENTS AT A SMALL LIBERAL ARTS
COLLEGE.



MAJORS	# STUDENTS
BUSINESS	230
BIOLOGY	180
PSYCHOLOGY	450
MATH	60
ENGLISH	150

**ASSUME
NO
DOUBLE
MAJOR**

1. TO THE NEAREST WHOLE PERCENTAGE,
WHAT PERCENTAGE OF STUDENTS
ARE BUSINESS MAJORS?
2. TO THE NEAREST WHOLE PERCENTAGE,
WHAT PERCENTAGE OF STUDENTS
ARE NOT PSYCHOLOGY MAJORS?

