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More Multiplying and Multiples

EXAMPLES

1. How many stickers are there in all?

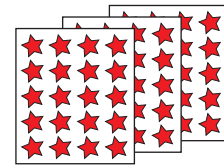
$$5 \times 4 \times 3 = 20 \times 3 = 60$$

There are 60 stickers in all.

2. $5 \times 4 \times 3 = 5 \times 12 = 60$

3. Show all the multiples of 3 up to 20.

$$\begin{array}{cccccc} 3 & , & 6 & , & 9 & , & 12 & , & 15 & , & 18 \\ \uparrow & & \uparrow & & \uparrow & & \uparrow & & \uparrow & & \uparrow \\ 3 \times 1 & & 3 \times 2 & & 3 \times 3 & & 3 \times 4 & & 3 \times 5 & & 3 \times 6 \end{array}$$



HINTS:

- The product of 3 factors remains the same even if their order is changed.

e.g. $5 \times 4 \times 3 = 3 \times 4 \times 5 = 3 \times 5 \times 4$
 $= 4 \times 5 \times 3 = 4 \times 3 \times 5$
 $= 5 \times 3 \times 4$
 $= 60$

- If possible, multiply the numbers with a product of 10, 20, 30, etc. first, and then multiply the 3rd number.
- Multiples of a number can be obtained by multiplying the number by 1, 2, 3 and so on.

Find the products.

① $2 \times 3 \times 6 =$ _____

② $5 \times 6 \times 7 =$ _____

③ $6 \times 7 \times 8 =$ _____

④ $7 \times 8 \times 9 =$ _____

⑤ $7 \times 2 \times 9 =$ _____

⑥ $6 \times 3 \times 4 =$ _____

⑧ $9 \times 3 \times 5 =$ _____

⑩ $7 \times 2 \times 8 =$ _____

⑫ $4 \times 6 \times 7 =$ _____

⑭ $6 \times 2 \times 9 =$ _____

⑯ $13 \times 7 \times 9 =$ _____

⑱ $11 \times 3 \times 7 =$ _____

⑳ $5 \times 16 \times 4 =$ _____

㉒ $6 \times 8 \times 31 =$ _____

⑦ $5 \times 2 \times 3 =$ _____

⑨ $6 \times 4 \times 8 =$ _____

⑪ $9 \times 5 \times 6 =$ _____

⑬ $3 \times 8 \times 5 =$ _____

⑮ $14 \times 2 \times 8 =$ _____

⑰ $8 \times 6 \times 15 =$ _____

⑲ $7 \times 9 \times 27 =$ _____

㉑ $23 \times 2 \times 5 =$ _____

㉓ $6 \times 37 \times 5 =$ _____

Help the students pick the cards they are going to color. Write the numbers in the ○.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

- ②4 Ted is going to color the cards which are multiples of 3 between 25 and 50.

○ ○ ○ ○ ○ ○
○ ○

- ②5 May is going to color the cards which are multiples of 4 up to 24.

○ ○ ○ ○ ○ ○

- ②6 Sally is going to color the cards which are multiples of 5 and not yet colored.

○ ○ ○ ○ ○ ○ ○

- ②7 Tim is going to draw a red star on each of the cards which are multiples of 2 up to 25.

○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○

- ②8 Ben is going to mark a black dot on each of the cards which are multiples of 2 between 25 and 50.

○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○

- ②9 Bob is going to draw a brown dot on each of the cards which are multiples of 6.

○ ○ ○ ○ ○ ○ ○ ○

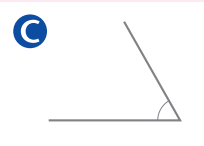
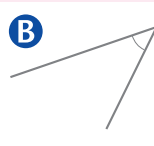
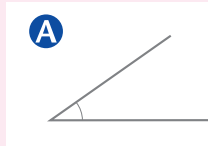
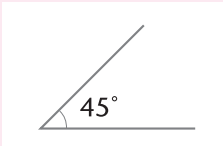
- ③0 Tom is asked to pick the cards which are multiples of 7.

○ ○ ○ ○ ○ ○ ○

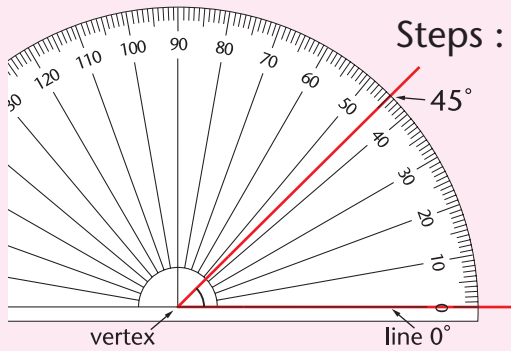
7 Angles

EXAMPLE

Which angle is equal to the angle on the left?



Measure the angles A, B, and C with a protractor.



- Steps:
1. Lengthen the line segments, if necessary.
 2. Place line 0° on one of the line segments and the center at the vertex.
 3. Record the angle in degrees ($^\circ$) between the line segments.

Answer: Angle B is 45° . It is equal to the angle on the left.

Solve the problems.

① Measure and mark the angles which show how the rocket flies.

T _____	O _____	B _____	F _____
S _____	F _____	L _____	A _____

② Which angle above is greater than a right angle?

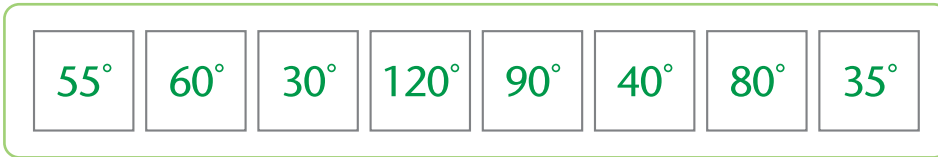
_____ is greater than a right

Answer: angle. _____

③ The sum of which 3 angles above equals the angle of a straight line?

Answer: _____

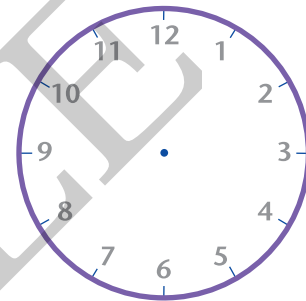
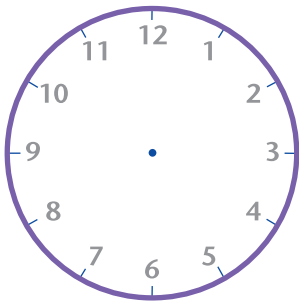
- ④ Write the letters represented by the angles to see what Alan is saying.



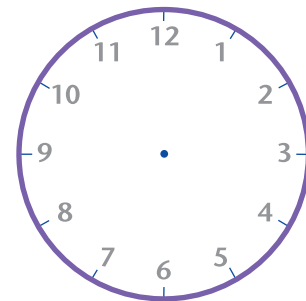
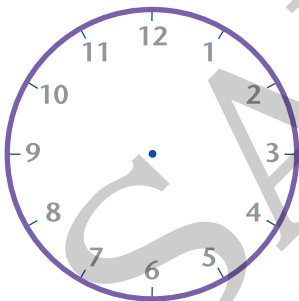
Draw the clock hands. Measure and mark the angle on each clock.

Irene is playing with a toy clock.

- ⑤ If it is 3 o'clock, what angle is made by the clock hands? ⑦ It is 9:00. What angle is made by the clock hands?



- ⑥ The hour hand is at 6. Where is the minute hand if the angle between the clock hands is 180° ? ⑧ Irene turns the clock to 7:00 and then to 8:00. What is the difference in the angles between the hands?



CHALLENGE

Try Irene's toy clock. If its hour hand doesn't move as the minute hand moves, after 3 o'clock, when will the hands of the clock be next at 90° ?

Answer : _____

