# Math 2 Homework 21

**Learn multiplication table by 0, 1, 2, 3, 4, 5 and 10 by heart!**

**1**

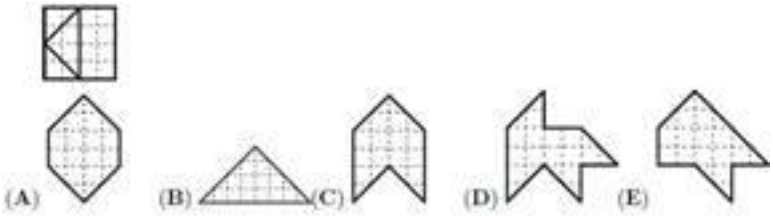
| | | |
|---|---|---|
| 4 × 0 = | 2 × 5 = | 1 × 5 = |
| 10 × 50 = | 20 × 3 = | 4 × 40 = |
| 6 × 30 = | 6 × 20 = | 30 × 4 = |
| 30 × 1 = | 50 × 10 = | 20 × 5 = |
| 20 × 7 = | 20 × 9 = | 2 × 60 = |
| 10 × 100 = | 4 × 50 = | 30 × 3 = |
| 70 × 3 = | 40 × 2 = | 50 × 30 = |

**Report the time you spent: _____ minutes**

**2**

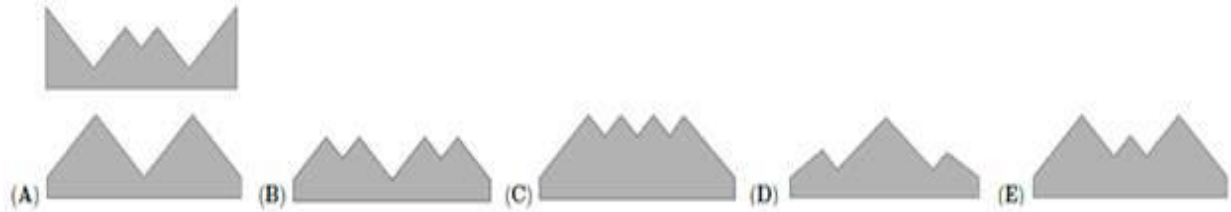
Practice Math Kangaroo:

A square was cut into 4 parts as shown in the picture below. Which of the following shapes cannot be made using only these 4 parts?



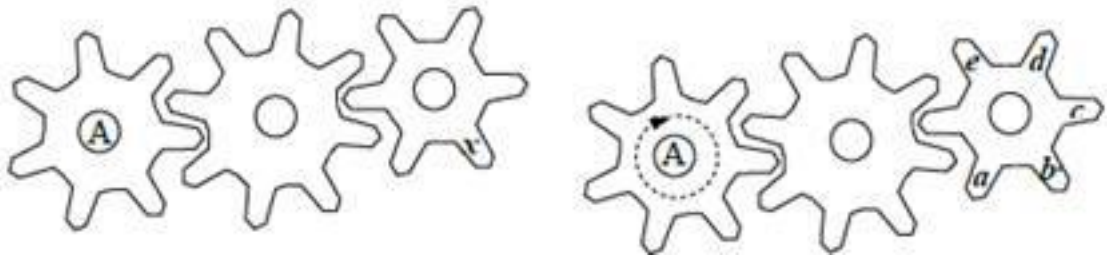

**3**

Which of the shapes shown below will fit the above shape exactly to make a rectangle?




**4**

Cogwheel *A* turns around completely once. At which place is *x* now?




A) *a* B) *b* C) *c* D) *d* E) *e*

**5**

Find out the rules for each table and fill in the empty boxes:

| | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| 1 | | | | |
| 2 | | 4 | | |
| 3 | 4 | | | 7 |
| 4 | | | | |

| | 2 | 4 | 5 | 7 |
|---|---|---|---|---|
| 1 | | | | 17 |
| 3 | | 34 | | |
| 6 | | | | |
| 8 | | | 85 | |

**6.**

Using a grid paper below, draw rectangles with an A (area) equal to:

a) 24 unit squares; b) 30 c) 36

How many rectangles you can draw in each case?

a) _____ b) _____ c) _____

**7** The area of a rectangle is 14 $cm^2$ and its length is 7 cm. What is the width this rectangle? _____

**8** Convert the units:

**1 m = 10 dm = 100 cm** **1 $m^2$ = 100 $dm^2$ = 10000 $cm^2$**

400 cm = ____ dm

400 $cm^2$ = ____$dm^2$

400 cm = ____ m

700 $dm^2$ = ____ $m^2$

2 m = ____ cm = ___ dm

6 $m^2$ = ____ $dm^2$

2 $dm^2$ = ____ $cm^2$

50 dm = ____ cm = ___ m

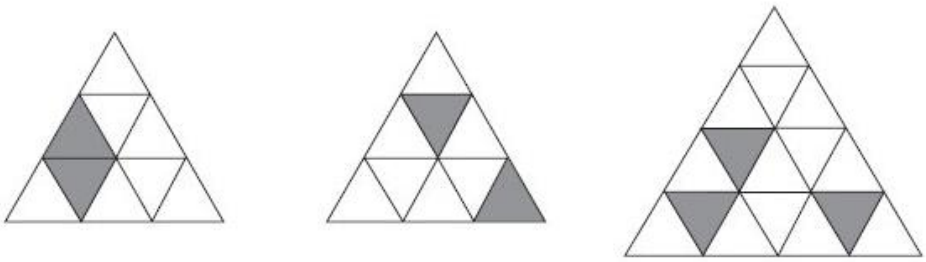
800 $dm^2$ = ____ $m^2$

**9** Write the correct numbers in the squares in order to obtain the correct multiplication problems in rows and columns.

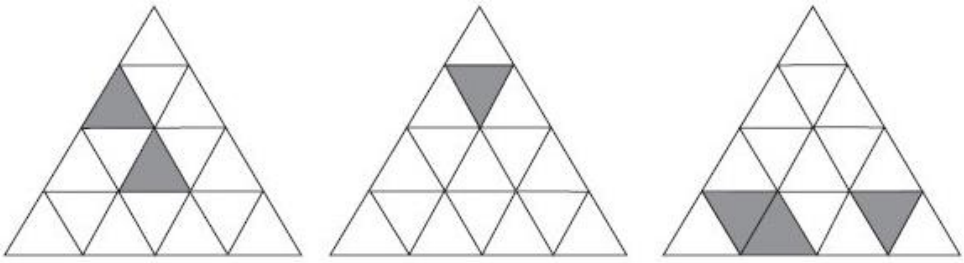
| | | |
|---|---|---|
| 5 6 \| 30<br>3 8 \| 24<br>15 48 | ☐☐ \| 80<br>☐☐ \| 32<br>40 64 | ☐☐ \| 27<br>☐☐ \| 32<br>36 24 |
| ☐☐ \| 42<br>☐☐ \| 72<br>54 56 | ☐☐ \| 12<br>☐☐ \| 30<br>18 20 | ☐☐ \| 56<br>☐☐ \| 9<br>7 72 |
| ☐☐ \| 9<br>☐☐ \| 35<br>21 15 | ☐☐ \| 24<br>☐☐ \| 36<br>16 54 | ☐☐ \| 63<br>☐☐ \| 2<br>18 7 |

**10**

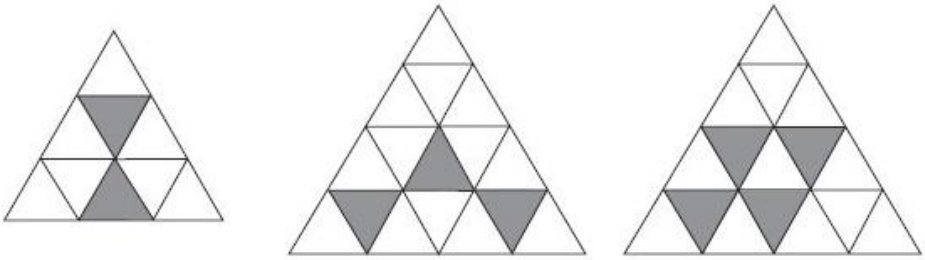
(a) On each of these grids complete the shading so that the pattern has reflection but **not** rotation symmetry.



(b) On each of these grids complete the shading so that the pattern has rotation but **not** reflection symmetry.



(c) On each of these grids complete the shading so that the pattern has reflection **and** rotation symmetry.



**11**

What numbers can you make with 1, 2, and 3, using operations of addition, subtraction, and multiplication, as well as parentheses?

*For example, here is the way to make 9: 3 × (2 + 1) = 9* *and 7: 3 × 2 + 1 = 7*

- Find a way to make 1.
- Find a way to make 3.
- Find a way to make 4.
- Find 3 different ways to make 5

Can you make 10?