Math 3 Homework 14

1

Calculate:

a) 999 + 1 = 199 + 1 = 79 + 1 = 629 + 1 =

1000 – 1 = 810 – 1= 500 – 1 = 1991 – 1 =

b) 2000 + 400 + 30 + 1 = 7000 + 20 + 7 =

9000 + 30 + 3 = 1000 + 700 + 20 + 6 =

c) Calculate the fastest way (rewrite the expression to show your way of calculation):

(303 + 274) + 26 = 81 + (9 + 27) =

(437 +92) – 37 = (364 +415) – 264 =

d) Increase the numbers in 10 times: 60, 600, 15, 150, 435

_____

2

a) Determine order of operations and calculate:

800 – 420 – 120 + 40 = 800 – (420 – 120) + 40

800 – 420 – (120 + 40) 800 – 120 + 8 × 20 =

b) Insert parentheses to make the equations correct:

$32 - 2 \times 6 + 3 = 183$ $32 - 2 \times 6 + 3 = 17$

$32 - 2 \times 6 + 3 = 23$ $32 - 2 \times 6 + 3 = 270$

3

a) Put all weights in order from the heaviest to the lightest:

2 kg, 1kg 900g, 250g, 25kg, 2,500g, 2kg 50g

_____

b) Put all lengths in order from the smallest to largest:

3m 3dm, 30dm, 333cm, 3dm 3cm, 303cm

_____

Report the time you spent: _____

HW 14 **Parallel and Perpendicular lines. Using compass for measuring distances. Long multiplication.**

4 Let's count angles.

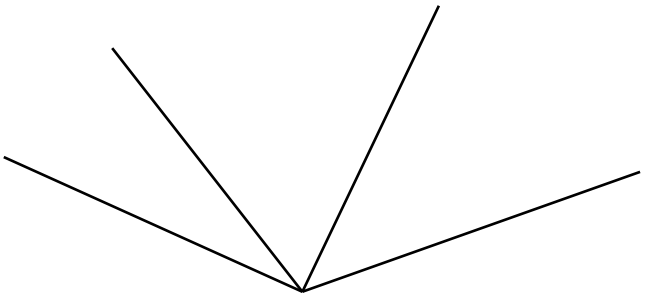
How many angles are on the sketch below? Name all angles using capital letters and

list all angles here: _____

list only obtuse angles here: _____

list only acute angles here: _____

If you are not sure, use the right angle template to confirm your answer:



5 What types of angles are formed by the hour hand and the minute hand on the clock face at the following times (right, obtuse, acute, straight) ?

a) 3 o'clock - angle _____ b) 4 o'clock - angle _____

c) half past 9 - angle _____ 11 o'clock - angle _____

6 Using the squared piece of paper below, draw a rectangle with a length of 8 square segments and the width of 6 square segments.

Find the perimeter of the rectangle you draw. P = _____

With one straight line, divide the rectangle into two identical rectangles.

Find the perimeter of each smaller rectangle.

Consider two different cases. P_1 = _____ P_2 = _____

7

Construct a line parallel to the line A_0A_2 on the distance of 3cm away from line A_0A_2. Call it B_0B_2

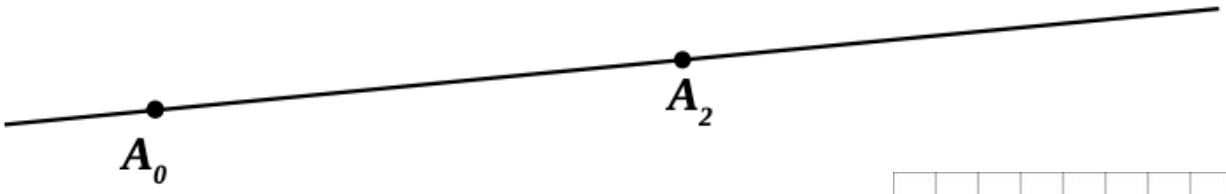
Reminder:

1 Use your protractor to draw a line that goes through A_0 and is at 90° to the line A_0A_2.

2. Use a ruler and measure the distance of 3 cm from the point A_0. Label the point B_0

3. Repeat the procedure for the point A_2.

4. Connect points B_0 and B_2 by a straight line.

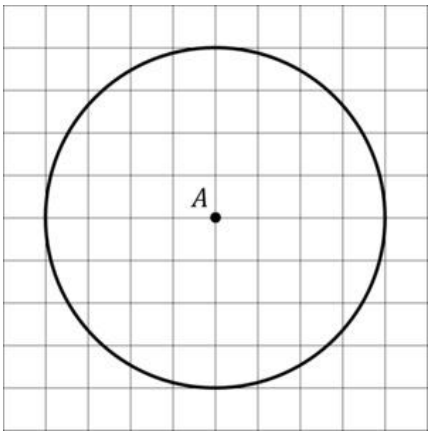


8

A circle with center *A* is drawn on 1cm grid paper as shown below.

What is the radius of the circle?

Draw another circle with a radius 2 times less than the radius of the circle on the picture.



9

Reminder: ***Adjacent angles*** *share a side and a vertex.*

Complementary angles *have measures that add up to 90 degrees.*

Supplementary angles *have measures that add up to 180^0 degrees.*

a) Find the pairs of supplementary angles and circle these pairs:

15^0 and 165^0 30^0 and 155^0 45^0 and 125^0

b) Find the pairs of complementary angles and circle these pairs:

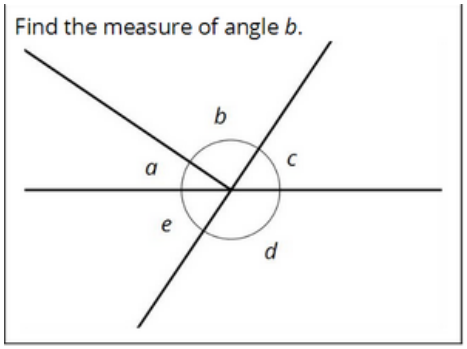
15^0 and 75^0 25^0 and 65^0 20^0 and 60^0

10

We know that:

- Angles ***a*** and ***c*** are complementary angles
- The measure of angle ***d*** = 124^0
- The measure of angle ***c*** = 56^0
- Angles ***c*** and ***e*** have equal measures.

Find: The measure of angle ***b.***



Angle ***b*** =

11 Use long multiplication to find answers to each of the following problems:

44 × 7= 65 × 3 = 45 × 4=

12 Use partial method to solve:

123 × 14 = 123 × 45 = 123 × 60 =

13 The table below consists of 8 columns and 6 rows. Is it possible to place check mark symbols in such a way?

a) to get 4 check marks in each row and 3 check marks in each column?

b) to get 3 check marks in each row and 2 check marks in each column?