

Review circle: definition and notation

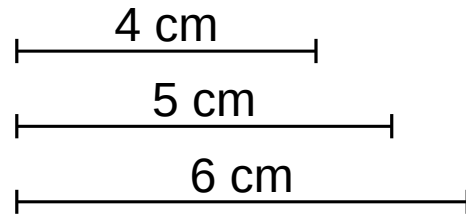
1. Plot the required circles:

1. $v = \text{Circ}(A, 4 \text{ cm})$

2. $w = \text{Circ}(A, 6 \text{ cm})$

3. $g = \text{Circ}(B, 6 \text{ cm})$

4. $h = \text{Circ}(C, 5 \text{ cm})$



A•

•
B

•
C

2. Plot an equilateral triangle $\triangle PQR$, record your algorithm

1. _____

2. _____

3. _____

4. _____

P•

Q•

2. Present each number as a product of prime factors:

a). $96 =$ _____

b). $72 =$ _____

c). $216 =$ _____

d). $100 =$ _____

e). $280 =$ _____

f). $365 =$ _____

3. Using the Sieve of Eratosthenes (on the reverse of this sheet), try to find all prime numbers between 1-100. [You only need to cross out multiples of numbers up to 11 (or actually 7).]

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
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

4. **Additional problem:** A broken robot policeman issues a speeding ticket to each 36^{th} car and red light ticket to each 48^{th} car. How often do drivers get two tickets?