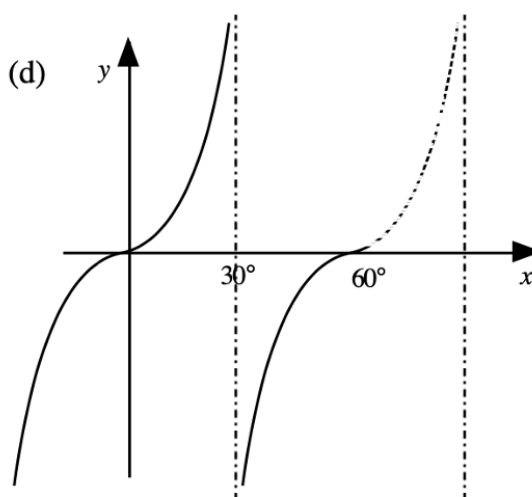
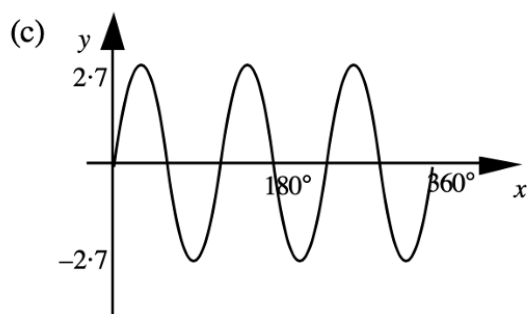
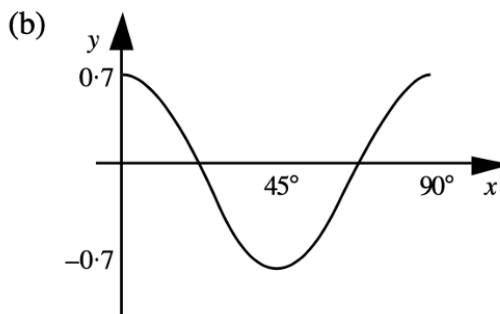
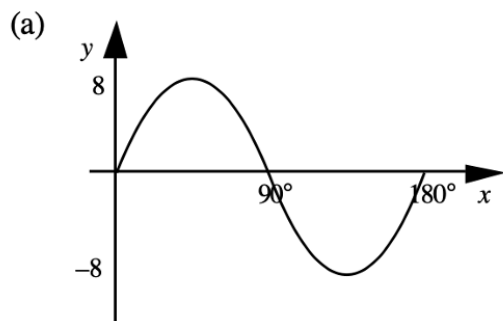


Trig Graphs

1.

Write down the equations of the trigonometric functions associated with the following graphs:



2.

Make neat sketches of the following, indicating all the main points and features:

(a) $y = 20\sin 4x^\circ$ $0 \leq x \leq 90$

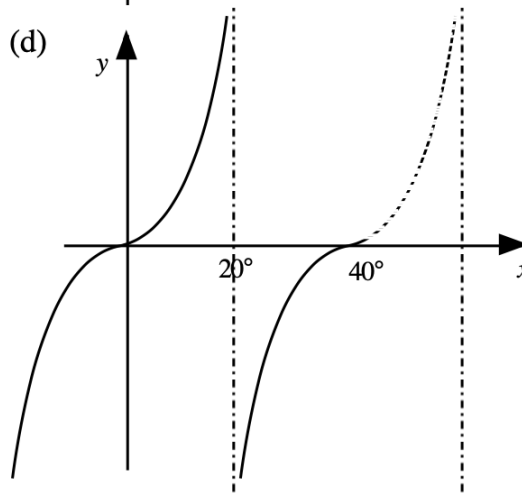
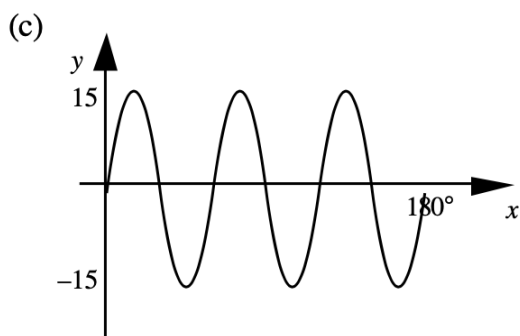
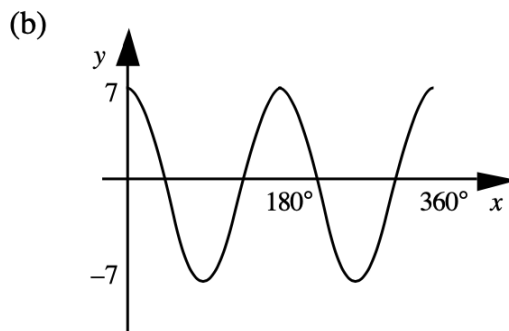
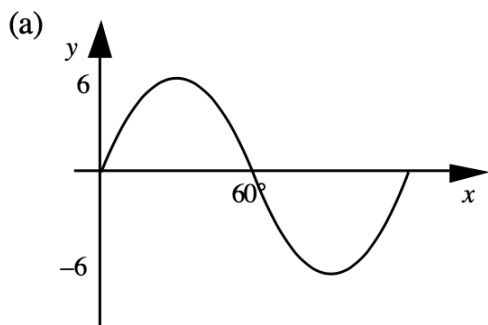
(b) $y = 1.6\cos 2x^\circ$ $0 \leq x \leq 360$

(c) $y = -8\sin 8x^\circ$ $0 \leq x \leq 90$

(d) $y = \tan 2x^\circ$ $0 \leq x \leq 90$

3.

What are the periods of the following trigonometric graphs and functions?



(e) $y = 10\sin 10x^\circ$

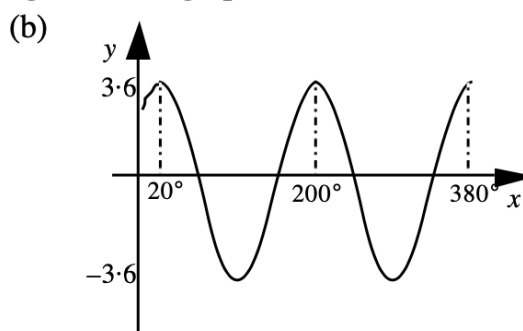
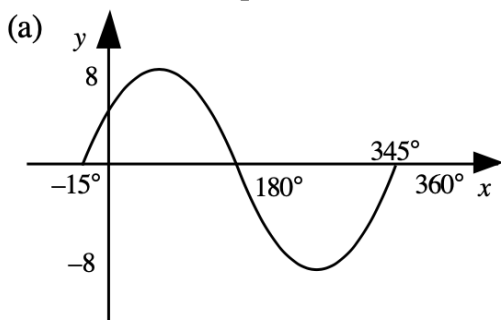
(f) $y = 2.3\cos 30x^\circ$

(g) $y = -4\sin 9x^\circ$

(h) $y = 5\tan 4x^\circ$

4.

Write down the equations of the following trigonometric graphs:



5.

Sketch the following trigonometric graphs, indicating their main features:

(a) $y = 18\cos(x + 30)^\circ \quad 0 \leq x \leq 360$

(b) $y = 2\sin(x - 10)^\circ \quad 0 \leq x \leq 360$

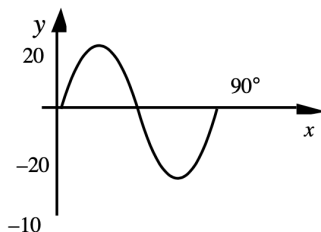
Answers

1.

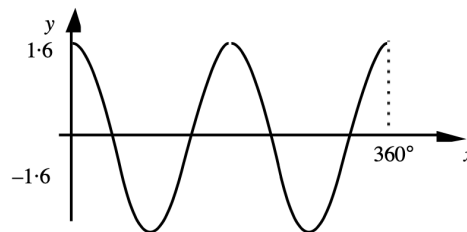
(a) $y = 8\sin 2x^\circ$ (b) $y = 0.7\cos 4x^\circ$ (c) $y = -2.7\sin 3x^\circ$ (d) $y = \tan 3x^\circ$

2.

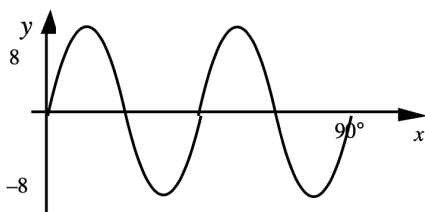
(a)



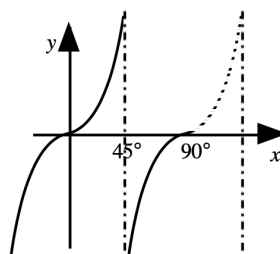
(b)



(c)



(d)



3.

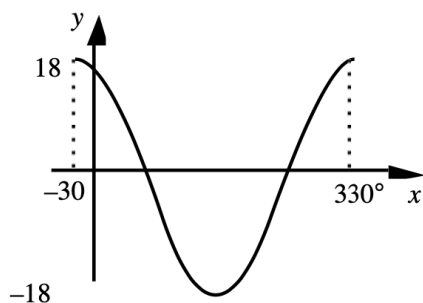
(a) 120° (b) 180° (c) 60° (d) 40°
 (e) 36° (f) 12° (g) 40° (h) 90° .

4.

(a) $y = 8\sin(x + 15)^\circ$ (b) $y = 3.6\cos(x - 20)^\circ$

5.

(a)



(b)

