(P7 NTM 6 Pgs 106 - 111)

106

1 **(a)** (4, ⁻3) **(b)** (6, 1) **(c)** (5, 0) **(d)** (⁻3, 0)
(e) (0, 3) **(f)** (0, ⁻1) **(g)** (⁻2, ⁻2)

2 **(a)** black **(b)** red **(c)** orange **(d)** blue
(e) ~~brown~~ pink **(f)** white **(g)** green **(h)** yellow

107

1 • (3, 0), (⁻1, 0), (⁻2, 1), (⁻6, 1), (⁻7, 2), (⁻6, 3), (⁻2, 3), (⁻1, 2), (3, 2), (4, 1),

• (3, 0), (⁻1, 0), (⁻2, ⁻1), (⁻6, ⁻1), (⁻7, ⁻2), (⁻6, ⁻3), (⁻2, ⁻3), (⁻1, ⁻2), (3, ⁻2), (4, ⁻1)

2 • (⁻2, 1), (⁻6, 1), (⁻6, 2), (⁻5, 2), (⁻5, 4) (⁻1, 4), (⁻1, 3), (⁻2, 3)
horizontal reflection:
(⁻2, ⁻1), (⁻6, ⁻1), (⁻6, ⁻2), (⁻5, ⁻2)
(⁻5, ⁻4), (⁻1, ⁻4), (⁻1, ⁻3), (⁻2, ⁻3)
vertical reflection:
(2, 1), (6, 1), (6, 2), (5, 2)
(5, 4), (1, 4), (1, 3), (2, 3)

108

1 **(a)** In the position shown: (⁻1, 2), (⁻6, 1), (⁻4, 3)
After translation: (5, 2), (0, 1), (2, 3)

(b) In the position shown: (1, ⁻1), (6, ⁻1), (4, ⁻3), (3, ⁻3)
After translation: (⁻4, ⁻1), (1, ⁻1), (⁻1, ⁻3), (⁻2, ⁻3)

(c) In the position shown: (⁻3, ⁻1), (⁻2, ⁻2), (⁻3, ⁻3), (⁻7, ⁻2)
After translation: (5, 0),(6, ⁻1), (5, ⁻2), (1, ⁻1)

(d) In the position shown: (0, 2), (1, 3), (5, 1), (1, 1)
After translation: (⁻6, 0), (⁻5, 1), (⁻1, ⁻1), (⁻5, ⁻1)

(e) In the position shown: (⁻4, 0), (⁻7, 0), (⁻6, 2), (⁻4, 2)
After translation: (1, ⁻2), (⁻2, ⁻2), (⁻1, 0), (1, 0)

(f) In the position shown: (5, 0), (7, 0), (5, ⁻2), (3, ⁻2)
After translation: (⁻2, 2), (0, 2), (⁻2, 0), (⁻4, 0)

109

1 **(a)** In the position shown: (0, 0), (0,3), (2, 0)
After rotation: (0,0), (⁻3, 0), (0, 2)

(b) In the position shown: (0, 0), (⁻1, 0), (⁻3, 2), (⁻2,3), (0,1)
After rotation: (0, 0), (1, 0), (3, ⁻2), (2, ⁻3), (0, ⁻1)

(c) In the position shown: (0, 0), (⁻2, 0), (⁻3, 1), (⁻2, 2), (0, 2), (⁻1, 1)
After rotation: (0, 0), (0, 2), (1, 3), (2, 2), (2, 0), (1, 1)

(d) In the position shown: (0, 0), (0, 2), (1, 2), (1, 3), (3, 3), (3, 1), (2, 1), (2, 0)
After rotation: (0, 0), (0, ⁻2,), (⁻1, ⁻2), (⁻1, ⁻3), (⁻3, ⁻3), (⁻3, ⁻1), (⁻2, ⁻1), (⁻2, 0,)

110

1 • acute: **I, L** • obtuse: **J, M** • reflex: **K, N**

2 **P** 80°, **Q** 35°, **R** 110°, **S** 155°, **T** 47°, **U** 122°

3 Check Pupil's drawings to show angles of
(a) 60° **(b)** 145° **(c)** 28° **(d)** 99°

111

1 **V** 320° **W** 95° **X** 278° **Y** 171°

2 **A** 60° **B** 100° **C** 90° **D** 75° **E** 59° **F** 27°