



## Vectors and Scalars Answers – NAT 5

1) 14.1N @ 45° below the horizontal

2) a) 7km

b) 3.5kmh<sup>-1</sup>

c) 5km @ 053°

d) 2.5kmh<sup>-1</sup> @ 053°

3) a) 3600m

b) 3ms<sup>-1</sup>

c) 2580m @ 216°

d) 2.15ms<sup>-1</sup> @ 216°

4)

Scalars	Vectors
distance	velocity
time	weight
speed	displacement
mass	force
power	acceleration

5) a) 80m

b) 20m @ 270°

6) 5.44 x 10<sup>4</sup>N @ 54° above the horizontal

7) a) 800m

b) 400m @ 180°

8) a) 380m

b) 0

9) 14.1kN @ 45° above the horizontal

10) 5.2ms<sup>-1</sup> @ 337°