

CHAPTER 6 TEST

1. B

2. C

3. B

4. B

5. A

6. C

7. D

8. D

9. A

10. C

Short Answer

1. 2

2. 2

$$\begin{aligned} 3. d(90) &= 153.8(90) + 86 \\ &= 13928 \text{ km} \\ &= 13.928 \text{ km} = 14 \text{ km} \end{aligned}$$

Problem

1. $f(x) = x^3 - 8x^2 - 3$

No. of possible x-intercepts = degree
= 3

y-intercept

$$\begin{aligned} y &= (0)^3 - 8(0)^2 - 3 = -3 \\ &= (0, -3) \end{aligned}$$

End behaviour = Falls on the left and rises on the right

Domain = $(-\infty, \infty)$

Range = $(-\infty, \infty)$

No. of possible turning points = Degree - 1 = $3 - 1 = 2$