Gradient:

1a. $\frac{1}{12}$ and 0.83

b. $\frac{4}{22}$ and 0.36

c. $\frac{1}{5}$ and 0.2

d. $\frac{13}{68}$ and 0.19

e. $\frac{17}{90}$ and 0.18

f. $\frac{6}{26}$ and 0.24

2a. 0.44, Advanced

b. 0.9, Beginner

c. 0.35, Intermediate

d. 0.25, Intermediate

3. ½ or 0.5

4. 7/10 or 0.7

5a. $\frac{7}{4000}$

b. 3/25 is steeper as a decimal it is 0.12 while the average is roughly 0.08

Gradient and Pythagoras

1a. 0.77

b. 0.15

c. 0.82

d. 0.22

2. 0.35, Intermediate

3. 0.198, it is less than 0.2 so it is not safe.

Gradient and Scale Drawing

(Answers will vary quite dramatically depending on your drawing)

1a. ii) 7m, iii) $\frac{7}{16}$ of 0.44

b. ii) 14m, iii) $\frac{7}{10}$ of 0.7

c. ii) 18m, iii) $\frac{9}{4}$ of 2.25

d. ii) 3m, iii) $\frac{3}{14}$ of 0.21

e. ii) 4.5m, iii) $\frac{3}{8}$ of 0.38

f. ii) 11m, iii) $\frac{11}{15}$ of 0.73

2. Approx. 0.25

3. Approx. 0.4