**Physics 30 - Lesson 6**

## Reflection of Light

/ 40

**Practice problems**

For the law of reflection, the angle of incidence and the angle of reflection are measured from the normal.

1)



2)

130o

135o

20o

20o

180–(20+130)

= 30

180–(30+135)

= 15

30o

15o

**75o**

For this problem we use two ideas. (a) θi = θr

(b) The angles of a triangle add up to 180o.

3)

4)

camera

θ

θ

θ

3.5 m

1.0 m

1.5 m

x

y



**Assignment**

1)



/2







2)

/2







3)

65o + 65o = 130o

/3

4)

10o + 10o = 20o

10o

10o

/3

50o

98o

A

B







50o

180o – 98o = 42o



5)

/3

6)

65o

62o

B

A



/4

7)



40o

90o

z

x

y

10.0 cm

/3

8)

A

B

7.0cm

z

x 10.0cm

y







/4

9)

****

G

/4

50 cm

3.0 m

Mirror





3.0m

x

10)



/4

11)

X

Y

/3

12)

2.0 m

4.0 m

B

3.0 m

Camera

**x**

mirror



*x*

*x*

4.0 m – 2.0 m =

2.0 m

/4

13)

•

•

/1