**Physics 30 - Lesson 6**

## Reflection of Light

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**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