```cpp
#include <iostream>
using namespace std;
class Polygon
{
        protected:
            int width, height;
        public:
            void set_values (int a, int b)
            {
                width=a;
                height=b;
            }
            virtual int area ()
            {
                return 0;
            }
};
class Rectangle: public Polygon
{
        public:
            int area ()
            {
                return width * height;
            }
};
class Triangle: public Polygon
{
        public:
            int area ()
            {
                return (width * height / 2);
            }
};
int main ()
{
        Rectangle rect;
        Triangle trgl;
        Polygon poly;

        Polygon * ppoly1 = &rect;
        Polygon * ppoly2 = &trgl;
        Polygon * ppoly3 = &poly;

        ppoly1->set_values (4,5);
        ppoly2->set_values (4,5);
        ppoly3->set_values (4,5);
        cout << ppoly1->area() << '\n';
        cout << ppoly2->area() << '\n';
        cout << ppoly3->area() << '\n';
        return 0;
}
```